

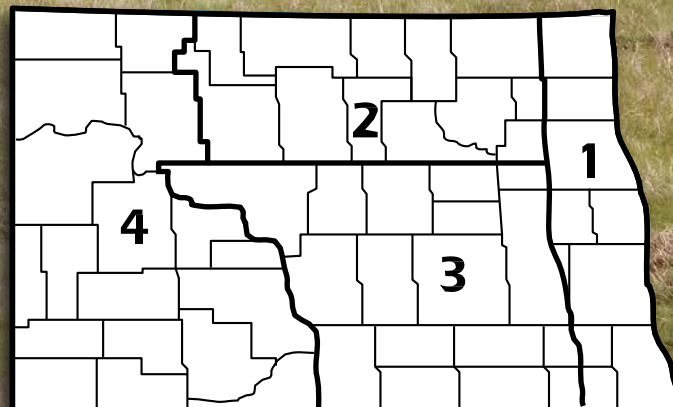
# 2013 ANNUAL REPORT

## Region 3

North Dakota Farm and Ranch  
Business Management Education



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and Technical Education

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# NORTH DAKOTA FARM BUSINESS MANAGEMENT EDUCATION

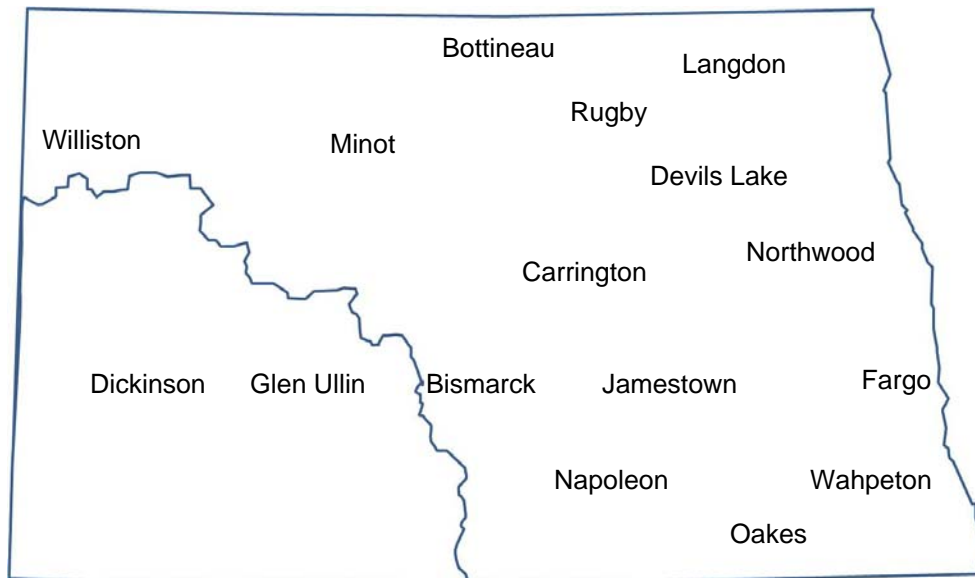
## REGION 3 – SOUTH CENTRAL AVERAGES 2013 ANNUAL REPORT

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

<u>School</u>	<u>Instructor</u>
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Oakes (JVCTC) .....	Lance Brower
Wahpeton (NDSCS) .....	Keith Torgerson

This report was made possible by the farm families who cooperated with their farm management instructors in getting the records for 2013 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



# 2013 South Central Report

## North Dakota Farm Business Management Education

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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 2013 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 25th 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, 2013**  
**(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	28,801	7,905	8,911	104,034
Beans, Black Turtle	420	-	-	2,045
Beans, Pinto	49,951	-	5,811	180,547
Buckwheat	35	-	175	-
Canola	7,015	258	-	20,737
Corn	227,495	186,675	49,977	404,820
Flax	1,782	2,161	1,226	3,051
Hay, Alfalfa	814	-	1,606	571
Hay, Grass	517	-	364	2,027
Hay, Mixed	520	1,466	523	-
Hay, Mixed Alfalfa/Grass	385	-	1,551	154
Oats	542	576	1,467	636
Rye	539	354	2,361	-
Soybeans	243,073	114,345	63,342	507,051
Straw	62	-	311	-
Sunflowers	15,914	7,517	9,483	52,581
Sunflowers, Confectionary	4,985	6,728	3,794	14,087
Wheat, Durum	1,395	-	3,514	593
Wheat, Spring	93,400	17,723	44,929	296,469
Wheat, Winter	3,728	2,522	3,917	237
Rented Out	3,070	669	1,556	9,777
Soybeans, Food	3,143	-	8,906	2,601
Beef Bulls	544	-	-	186
Beef Cow-Calf, Beef Calves	21,297	9,632	24,486	13,563
Beef Replacement Heifers	8,797	10,047	5,912	17,388
Beef Backgrounding	33,633	40,330	40,019	25,715
Beef Finishing	24,391	8,184	1,708	66,294
Beef Finish Yearlings	243	-	969	-
Beef Grazing	1,788	691	1,290	6,787
Dairy, Milk	27,715	123,459	4,873	10,825
Dairy, Dairy Calves	490	2,387	-	77
Hogs, Farrow To Finish, Raised Ho	1,938	9,755	-	-
Sheep, Feeder Lamb Prod, Fdr Lamb	343	-	1,275	259
Sheep, Feeder Lamb Prod, Wool	24	-	123	-
Sheep, Lamb Finishing	122	-	613	-
Sheep, Market Lamb Prod, Mkt Lamb	439	-	-	2,137
Sheep, Market Lamb Prod, Wool	37	-	-	180
Beef Finish Cull Cows	570	-	-	1,620
Dairy Feeder	113	-	-	549
Dairy Backgrounding	146	735	-	-
Cull breeding livestock	11,046	16,429	11,209	7,726
Misc. livestock income	2,019	375	3,083	3
Direct, CCP & ACRE pymts	16,834	11,352	5,760	38,811
CRP payments	1,635	877	1,451	1,933
Other government payments	19,158	12,264	13,093	29,239
Custom work income	29,841	122,199	3,905	10,230
Patronage dividends, cash	4,307	4,151	2,280	7,850
Crop insurance income	45,089	31,224	36,742	103,953
Property insurance income	2,477	1,807	314	2,356
Sale of resale items	554	28	-	-
Other farm income	12,146	6,679	7,247	20,837
<b>Gross Cash Farm Income</b>	<b>955,323</b>	<b>761,505</b>	<b>380,075</b>	<b>1,970,535</b>

**Farm Income Statement (Continued)**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(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	90,235	61,625	31,846	174,976
Fertilizer	95,614	71,711	36,545	204,640
Crop chemicals	52,283	41,406	17,609	118,890
Crop insurance	33,440	24,404	13,936	62,186
Drying expense	5,150	1,523	1,349	11,803
Storage	638	10	-	2,019
Irrigation energy	293	426	200	76
Crop machinery leases	41	-	-	198
Crop marketing	659	707	341	712
Crop miscellaneous	1,105	364	1,177	1,256
Consultants	773	-	188	1,331
Feeder livestock purchase	27,385	8,470	13,454	67,015
Purchased feed	36,225	101,007	14,614	27,482
Breeding fees	437	942	108	810
Veterinary	4,583	11,871	2,586	2,818
Supplies	3,206	8,369	1,121	1,697
Livestock custom hire	204	358	-	282
Grazing fees	37	185	-	-
Hauling and trucking	851	4,286	-	-
Livestock marketing	1,040	1,658	1,344	1,029
Interest	27,393	35,118	21,128	36,074
Fuel & oil	48,494	66,802	16,150	87,561
Repairs	56,605	72,389	20,724	106,467
Custom hire	17,411	22,477	12,888	27,988
Hired labor	32,525	65,403	9,339	56,628
Land rent	85,133	55,612	29,119	185,399
Machinery leases	6,086	10,037	3,048	10,140
Building leases	495	113	98	1,431
Real estate taxes	5,188	4,102	2,618	7,350
Farm insurance	15,313	13,146	3,873	37,939
Utilities	9,089	12,096	4,066	14,950
Dues & professional fees	3,013	3,022	527	7,286
Purchase of resale items	315	-	-	-
Miscellaneous	13,668	9,119	9,429	26,474
Total cash expense	674,927	708,758	269,424	1,284,906
Net cash farm income	280,396	52,746	110,651	685,629
<b>Inventory Changes</b>				
Prepays and supplies	-7,104	-6,156	-263	2,188
Accounts receivable	5,039	12,342	8,555	10,206
Hedging accounts	3,087	534	1,650	9,706
Other current assets	1,407	3,990	711	1,795
Crops and feed	-85,459	-103,422	-22,897	-89,819
Market livestock	12,161	4,440	7,255	28,528
Breeding livestock	-1,589	-8,595	7,783	-432
Other assets	3,776	6,815	1,273	5,541
Accounts payable	-638	-211	-8,990	6,234
Accrued interest	-219	-1,748	5,815	-483
Total inventory change	-69,538	-92,011	892	-26,535
Net operating profit	210,858	-39,265	111,543	659,094
<b>Depreciation</b>				
Machinery and equipment	-57,901	-25,359	-20,860	-140,056
Titled vehicles	-4,084	-4,884	-2,602	-4,870
Buildings and improvements	-6,306	-5,649	-2,140	-15,329
Total depreciation	-68,291	-35,892	-25,602	-160,255
Net farm income from operations	142,567	-75,157	85,941	498,839
Gain or loss on capital sales	538	534	7	1,021
Net farm income	143,105	-74,624	85,948	499,860

**Inventory Changes**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(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
Net cash farm income	280,396	52,746	110,651	685,629
<b>Crops and Feed</b>				
Ending inventory	533,233	226,805	173,214	1,537,306
Beginning inventory	618,691	330,227	196,111	1,627,125
Inventory change	-85,459	-103,422	-22,897	-89,819
<b>Market Livestock</b>				
Ending inventory	75,141	81,852	65,428	86,632
Beginning inventory	62,980	77,411	58,172	58,104
Inventory change	12,161	4,440	7,255	28,528
<b>Accts Receivable</b>				
Ending inventory	43,824	46,915	19,296	27,172
Beginning inventory	38,785	34,573	10,741	16,965
Inventory change	5,039	12,342	8,555	10,206
<b>Prepaid Expenses and Supplies</b>				
Ending inventory	99,755	30,123	20,593	287,265
Beginning inventory	106,858	36,278	20,856	285,077
Inventory change	-7,104	-6,156	-263	2,188
<b>Hedging Activities</b>				
Ending inventory	6,324	1,312	1,865	20,376
Withdrawals	2,934	1,241	1,943	5,648
Beginning inventory	3,304	1,381	1,075	11,601
Deposits	2,867	638	1,083	4,717
Gain or loss	3,087	534	1,650	9,706
<b>Other Current Assets</b>				
Ending inventory	4,209	4,602	3,397	4,764
Beginning inventory	2,802	613	2,686	2,969
Inventory change	1,407	3,990	711	1,795
<b>Breeding Livestock</b>				
Ending inventory	96,185	137,225	113,545	76,516
Capital sales	4,921	14,770	1,356	262
Beginning inventory	91,038	148,274	94,487	70,743
Capital purchases	11,658	12,316	12,631	6,467
Depreciation, capital adjust	-1,589	-8,595	7,783	-432
<b>Other Capital Assets</b>				
Ending inventory	55,423	55,384	17,696	148,858
Capital sales	3,616	-	3,227	13,343
Beginning inventory	51,771	45,294	12,008	150,421
Capital purchases	3,491	3,275	7,642	6,239
Depreciation, capital adjust	3,776	6,815	1,273	5,541
<b>Accounts Payable</b>				
Beginning inventory	18,135	44,081	6,488	20,132
Ending inventory	18,773	44,292	15,478	13,898
Inventory change	-638	-211	-8,990	6,234
<b>Accrued Interest</b>				
Beginning inventory	13,070	13,987	13,045	16,934
Ending inventory	13,289	15,735	7,231	17,417
Inventory change	-219	-1,748	5,815	-483
Total inventory change	-69,538	-92,011	892	-26,535
Net operating profit	210,858	-39,265	111,543	659,094

**Depreciation**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(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	210,858	-39,265	111,543	659,094
<b>Machinery and Equipment</b>				
Ending inventory	681,321	383,083	206,638	1,516,460
Capital sales	9,652	7,056	5,878	17,207
Beginning inventory	601,430	341,909	197,576	1,308,058
Capital purchases	147,444	73,589	35,799	365,664
Depreciation, capital adjust.	-57,901	-25,359	-20,860	-140,056
<b>Titled Vehicles</b>				
Ending inventory	39,515	51,976	21,604	48,700
Capital sales	474	1,654	483	95
Beginning inventory	34,972	39,948	20,020	44,785
Capital purchases	9,102	18,565	4,669	8,879
Depreciation, capital adjust.	-4,084	-4,884	-2,602	-4,870
<b>Buildings and Improvements</b>				
Ending inventory	208,477	163,856	53,285	440,617
Capital sales	962	-	-	1,917
Beginning inventory	155,398	139,129	49,850	340,513
Capital purchases	60,347	30,376	5,575	117,350
Depreciation, capital adjust.	-6,306	-5,649	-2,140	-15,329
Total depreciation, capital adj.	-68,291	-35,892	-25,602	-160,255
Net farm income from operations	142,567	-75,157	85,941	498,839
Gain or loss on capital sales	538	534	7	1,021
Net farm income	143,105	-74,624	85,948	499,860

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**Profitability Measures**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(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	142,567	-75,157	85,941	498,839
Rate of return on assets	4.7 %	-4.8 %	6.8 %	8.4 %
Rate of return on equity	5.3 %	-14.4 %	9.0 %	10.0 %
Operating profit margin	13.6 %	-14.0 %	18.7 %	23.0 %
Asset turnover rate	34.8 %	34.3 %	36.4 %	36.5 %
Farm interest expense	27,612	36,866	15,314	36,557
Value of operator lbr and mgmt.	57,845	40,566	34,929	113,006
Return on farm assets	112,333	-78,857	66,326	422,390
Average farm assets	2,377,823	1,645,178	976,760	5,047,836
Return on farm equity	84,721	-115,723	51,012	385,833
Average farm equity	1,610,713	801,636	564,493	3,859,062
Value of farm production	828,511	564,143	355,368	1,840,159



**Liquidity & Repayment Capacity Measures**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(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	1.94	1.13	2.20	2.55
Working capital	289,952	41,130	176,228	823,780
Working capital to gross inc	39.1 %	8.2 %	46.0 %	50.5 %
Current assets	599,341	366,047	322,556	1,356,424
Current liabilities	309,389	324,918	146,329	532,644
Gross revenues (accrual)	742,284	501,804	383,442	1,630,280
<b>Repayment capacity</b>				
Net farm income from operations	142,567	-75,157	85,941	498,839
Depreciation	68,291	35,892	25,602	160,255
Personal income	33,198	34,726	22,188	37,687
Family living/owner withdrawals	-69,866	-54,804	-48,794	-113,506
Payments on personal debt	-4,404	-3,130	-4,001	-4,694
Income taxes paid	-22,319	-12,932	-9,188	-41,870
Interest on term debt	20,921	25,103	17,385	25,983
Capital debt repayment capacity	168,388	-50,302	89,133	562,693
Scheduled term debt payments	-94,935	-109,226	-45,924	-162,897
Capital debt repayment margin	73,454	-159,528	43,209	399,796
Cash replacement allowance	-33,571	-9,931	-12,379	-77,567
Replacement margin	39,882	-169,459	30,830	322,230
Term debt coverage ratio	1.77	-0.46	1.94	3.45
Replacement coverage ratio	1.31	-0.42	1.53	2.34

**Balance Sheet at Cost Values**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(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	28	28	25
<b>Assets</b>				
<b>Current Farm Assets</b>				
Cash and checking balance	26,355	28,258	34,056	31,592
Prepaid expenses & supplies	75,761	30,306	21,209	216,639
Growing crops	2,666	4,767	3,518	2,112
Accounts receivable	28,346	24,027	19,985	22,851
Hedging accounts	3,094	1,359	1,931	8,742
Crops held for sale or feed	387,098	192,662	177,878	988,205
Crops under government loan	-	-	-	-
Market livestock held for sale	74,798	84,669	63,979	86,244
Other current assets	1,223	-	-	40
Total current farm assets	599,341	366,047	322,556	1,356,424
<b>Intermediate Farm Assets</b>				
Breeding livestock	80,885	80,497	113,186	52,070
Machinery and equipment	561,756	310,072	206,161	1,296,068
Titled vehicles	30,633	37,130	22,376	34,309
Other intermediate assets	8,553	16,914	10,438	2,687
Total intermediate farm assets	681,827	444,613	352,160	1,385,134
<b>Long Term Farm Assets</b>				
Farm land	516,654	368,092	280,312	1,039,855
Buildings and improvements	173,944	108,533	55,188	390,308
Other long-term assets	15,875	15,112	7,890	20,549
Total long-term farm assets	706,473	491,736	343,390	1,450,712
Total Farm Assets	1,987,640	1,302,397	1,018,106	4,192,270
Total Nonfarm Assets	265,808	108,719	193,595	391,968
Total Assets	2,253,448	1,411,116	1,211,701	4,584,238
<b>Liabilities</b>				
<b>Current Farm Liabilities</b>				
Accrued interest	11,885	13,013	7,485	17,547
Accounts payable	17,327	34,237	15,974	15,218
Current notes	211,304	223,115	93,188	360,439
Government crop loans	-	-	-	-
Principal due on term debt	68,873	54,552	29,682	139,441
Total current farm liabilities	309,389	324,918	146,329	532,644
Total intermediate farm liabs	165,732	130,160	97,465	320,898
Total long term farm liabilities	269,470	261,790	190,914	457,306
Total farm liabilities	744,591	716,868	434,707	1,310,848
Total nonfarm liabilities	44,478	28,758	32,750	69,147
Total liabilities	789,069	745,626	467,457	1,379,996
Net worth (farm and nonfarm)	1,464,379	665,490	744,244	3,204,242
Net worth change	76,053	-65,069	53,521	317,437
Percent net worth change	5 %	-9 %	8 %	11 %
<b>Ratio Analysis</b>				
Current farm liabilities / assets	52 %	89 %	45 %	39 %
Intermediate farm liab. / assets	24 %	29 %	28 %	23 %
Long term farm liab. / assets	38 %	53 %	56 %	32 %
Total debt to asset ratio	35 %	53 %	39 %	30 %

**Statement Of Cash Flows**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(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)	44,492	35,286	46,952	65,667
<b>Cash Provided By Operating Activities</b>				
Gross cash farm income	955,323	761,505	380,075	1,970,535
Total cash farm expense	-674,927	-708,758	-269,424	-1,284,906
Net cash from hedging transactions	66	603	861	932
Cash provided by operating	280,462	53,350	111,512	686,561
<b>Cash Provided By Investing Activities</b>				
Sale of breeding livestock	5,030	15,251	1,363	262
Sale of machinery & equipment	10,059	7,125	5,878	18,237
Sale of titled vehicles	499	1,638	483	95
Sale of farm land	-	-	-	-
Sale of farm buildings	961	-	-	1,909
Sale of other farm assets	3,616	-	3,227	13,343
Sale of nonfarm assets	6,148	1,459	1,920	6,261
Purchase of breeding livestock	-11,658	-12,316	-12,631	-6,467
Purchase of machinery & equip.	-147,444	-73,589	-35,799	-365,664
Purchase of titled vehicles	-9,102	-18,565	-4,669	-8,879
Purchase of farm land	-49,123	-48,753	-13,793	-120,487
Purchase of farm buildings	-60,347	-30,376	-5,575	-117,350
Purchase of other farm assets	-3,491	-3,275	-7,642	-6,239
Purchase of nonfarm assets	-36,386	-5,236	-19,957	-63,607
Cash provided by investing	-291,239	-166,639	-87,196	-648,587
<b>Cash Provided By Financing Activities</b>				
Money borrowed	644,678	569,015	362,497	1,166,859
Principal payments	-571,195	-421,281	-344,751	-1,077,490
Personal income	33,198	34,726	22,188	37,687
Family living/owner withdrawals	-69,866	-54,804	-48,794	-113,506
Income and social security tax	-22,319	-12,932	-9,188	-41,870
Capital contributions	-	-	-	-
Capital distributions	-9,684	-	-	-47,131
Dividends paid	-	-	-	-
Cash gifts and inheritances	2,270	1,059	1,382	2,827
Gifts given	-3,599	-2,814	-2,347	-9,566
Other cash flows	-	-	-	-
Cash provided by financing	3,483	112,969	-19,013	-82,190
Net change in cash balance	-7,294	-320	5,302	-44,216
Ending cash (farm & nonfarm)	37,198	34,965	52,255	21,450

**Financial Standards Measures**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(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	1.94	1.13	2.20	2.55
Working capital	289,952	41,130	176,228	823,780
Working capital to gross inc	39.1 %	8.2 %	46.0 %	50.5 %
<b>Solvency (cost)</b>				
Farm debt to asset ratio	37 %	55 %	43 %	31 %
Farm equity to asset ratio	63 %	45 %	57 %	69 %
Farm debt to equity ratio	0.60	1.22	0.75	0.45
<b>Profitability (cost)</b>				
Rate of return on farm assets	4.7 %	-4.8 %	6.8 %	8.4 %
Rate of return on farm equity	5.3 %	-14.4 %	9.0 %	10.0 %
Operating profit margin	13.6 %	-14.0 %	18.7 %	23.0 %
Net farm income	143,105	-74,624	85,948	499,860
EBITDA	238,470	-2,399	126,856	695,651
<b>Repayment Capacity</b>				
Capital debt repayment capacity	168,388	-50,302	89,133	562,693
Capital debt repayment margin	73,454	-159,528	43,209	399,796
Replacement margin	39,882	-169,459	30,830	322,230
Term debt coverage ratio	1.77	-0.46	1.94	3.45
Replacement coverage ratio	1.31	-0.42	1.53	2.34
<b>Efficiency</b>				
Asset turnover rate (cost)	34.8 %	34.3 %	36.4 %	36.5 %
Operating expense ratio	73.3 %	100.4 %	66.9 %	64.0 %
Depreciation expense ratio	7.7 %	5.3 %	6.7 %	8.3 %
Interest expense ratio	3.1 %	5.5 %	4.0 %	1.9 %
Net farm income ratio	16.0 %	-11.1 %	22.4 %	25.8 %

**Crop Production and Marketing Summary**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(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	967	790	699	1,436
Total crop acres	1,952	1,362	994	4,052
Crop acres owned	565	388	391	997
Crop acres cash rented	1,299	950	542	2,905
Crop acres share rented	87	24	61	151
Total pasture acres	571	555	699	463
Percent crop acres owned	29 %	28 %	39 %	25 %
Mach invest/crop acre cost	347	293	224	360
<b>Average Price Received (Cash Sales Only)</b>				
Soybeans per bushel	13.02	13.03	13.08	13.06
Corn per bushel	5.86	5.16	5.92	5.84
Wheat, Spring per bushel	7.51	6.64	7.10	7.72
Barley per bushel	6.20	-	-	6.12
Sunflowers per cwt	24.40	20.73	-	-
Beans, Pinto per cwt	35.49	-	-	35.99
Wheat, Winter per bushel	7.10	-	-	-
Canola per cwt	23.10	-	-	21.87
Sunflowers, Confectionary per cwt	34.38	-	-	-
Hay, Grass per ton	62.09	-	-	-
Flax per bushel	14.20	-	-	-
<b>Average Yield Per Acre</b>				
Soybeans (bushel)	32.01	22.93	29.47	36.24
Corn (bushel)	110.66	91.05	82.44	122.12
Wheat, Spring (bushel)	56.41	-	45.23	61.23
Pasture (aum)	0.963	1.05	0.900	1.03
Hay, Mixed Alfalfa/Grass (ton)	1.56	-	1.64	1.57
Hay, Grass (ton)	1.60	-	1.86	1.60
Barley (bushel)	74.08	-	74.63	74.12
Hay, Alfalfa (ton)	2.14	2.07	2.01	2.29
Corn Silage (ton)	13.47	15.18	11.62	11.08
Beans, Pinto (cwt)	19.77	-	-	20.30
Sunflowers (cwt)	11.81	-	10.96	11.63
Wheat, Winter (bushel)	45.67	-	-	-
Canola (cwt)	17.11	-	-	-
Hay, Small Grain (ton)	2.78	-	2.03	-
Oats (bushel)	69.28	-	66.93	-

**Household and Personal Expenses**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(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	66	13	12	12
Average family size	2.9	3.1	2.3	3.2
<b>Family Living Expenses</b>				
Food and meals expense	7,314	7,522	5,913	8,126
Medical care	4,713	4,885	4,234	4,373
Health insurance	7,337	5,257	5,967	9,430
Cash donations	1,926	2,304	1,126	1,724
Household supplies	7,332	7,194	3,972	7,731
Clothing	2,207	1,225	1,910	4,129
Personal care	8,048	5,181	3,713	11,246
Child / Dependent care	429	313	34	895
Alimony and child support	-	-	-	-
Gifts	1,538	633	1,515	1,535
Education	1,584	924	461	2,074
Recreation	4,062	3,270	2,758	6,792
Utilities (household share)	3,350	2,710	3,345	3,709
Personal vehicle operating exp	3,310	3,480	2,953	3,225
Household real estate taxes	215	-	170	214
Dwelling rent	267	879	517	-
Household repairs	4,110	5,946	2,282	3,183
Personal interest	872	118	316	886
Disability / Long term care ins	561	1,505	-	32
Life insurance payments	2,071	1,394	849	4,312
Personal property insurance	229	91	169	291
Miscellaneous	684	-	136	2,126
Total cash family living expense	62,159	54,830	42,339	76,033
Family living from the farm	143	73	667	-
Total family living	62,302	54,903	43,005	76,033
<b>Other Nonfarm Expenditures</b>				
Income taxes	23,037	7,497	10,909	49,082
Furnishing & appliance purchases	466	46	-	-
Nonfarm vehicle purchases	4,033	2,462	-208	11,735
Nonfarm real estate purchases	11,406	-	20,092	781
Other nonfarm capital purchases	12,662	356	1,583	7,565
Nonfarm savings & investments	8,111	3,469	17,135	10,378
Total other nonfarm expenditures	59,714	13,830	49,511	79,540
Total cash family living investment & nonfarm capital purch	121,873	68,659	91,850	155,573

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**Operator and Labor Information**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(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	1.2
Average age of operators	46.2	46.9	41.8	48.7
Average number of years farming	22.7	22.2	18.4	25.7
<b>Results Per Operator</b>				
Working capital	419,716	10,959	170,163	1,232,109
Total assets (cost)	2,519,713	1,711,357	1,149,380	4,791,293
Total liabilities	793,305	915,629	438,842	1,110,700
Net worth (cost)	1,726,408	795,728	710,538	3,680,593
Gross farm income	835,229	651,165	370,654	1,658,277
Total farm expense	701,802	723,817	287,578	1,230,701
Net farm income from operations	133,428	-72,652	83,076	427,576
Net nonfarm income	31,070	33,568	21,449	32,303
Family living & tax withdrawals	86,276	65,478	56,050	133,179
Total acres owned	904.9	763.7	675.3	1,231.1
Total crop acres	1,826.5	1,316.6	960.8	3,473.4
Crop acres owned	528.6	374.8	378.2	854.5
Crop acres cash rented	1,216.0	918.4	523.7	2,489.6
Crop acres share rented	81.9	23.3	58.9	129.2
Total pasture acres	533.9	536.8	675.6	396.7
<b>Labor Analysis</b>				
Number of farms	146	29	29	30
Total unpaid labor hours	1,979	1,766	1,809	2,740
Total hired labor hours	1,660	4,264	550	2,056
Total labor hours per farm	3,639	6,029	2,359	4,796
Unpaid hours per operator	1,852	1,707	1,748	2,349

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**Nonfarm Summary**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(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	18,687	25,153	16,351	9,318
Net nonfarm business income	7,489	7,169	2,193	20,265
Personal rental income	2,406	340	-	1,420
Personal interest income	447	2	240	1,608
Personal cash dividends	98	-	164	180
Tax refunds	1,047	1,608	1,038	141
Other nonfarm income	3,024	454	2,202	4,756
Total nonfarm income	33,198	34,726	22,188	37,687
Gifts and inheritances	2,270	1,059	1,382	2,827



**Financial Summary**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(Farms Sorted By Gross Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Less than 100,000</u>	<u>100,001 - 250,000</u>	<u>250,001 - 500,000</u>	<u>500,001 - 1,000,000</u>	<u>1,000,001- 2,000,000</u>	<u>Over 2,000,000</u>
Number of farms	146	11	24	26	37	30	18
<b>Income Statement</b>							
Gross cash farm income	955,323	51,285	188,252	370,575	665,219	1,359,712	3,297,530
Total cash farm expense	674,927	40,855	139,331	316,016	454,184	924,356	2,333,003
Net cash farm income	280,396	10,430	48,921	54,559	211,034	435,356	964,527
Inventory change	-69,538	8,629	245	8,471	-50,551	-129,260	-262,523
Depreciation	-68,291	-2,724	-12,613	-20,645	-43,540	-103,714	-243,259
Net farm income from operations	142,567	16,335	36,554	42,385	116,943	202,382	458,744
Gain or loss on capital sales	538	241	-	628	419	321	1,914
Average net farm income	143,105	16,576	36,554	43,012	117,362	202,703	460,659
Median net farm income	85,146	9,283	32,548	60,250	110,841	174,141	351,417
<b>Profitability (cost)</b>							
Rate of return on assets	4.7 %	4.9 %	3.7 %	3.2 %	4.5 %	5.1 %	4.9 %
Rate of return on equity	5.3 %	4.6 %	3.8 %	2.4 %	4.8 %	6.1 %	5.4 %
Operating profit margin	13.6 %	23.8 %	13.3 %	7.3 %	15.3 %	13.4 %	14.0 %
Asset turnover rate	34.8 %	20.7 %	27.5 %	43.3 %	29.4 %	38.1 %	35.3 %
<b>Liquidity &amp; Repayment (end of year)</b>							
Current assets	599,341	61,107	153,064	303,979	545,473	1,057,623	1,811,952
Current liabilities	309,389	21,945	70,297	218,778	242,062	514,122	1,020,897
Current ratio	1.94	2.78	2.18	1.39	2.25	2.06	1.77
Working capital	289,952	39,162	82,767	85,201	303,411	543,501	791,056
Working capital to gross inc	39.1 %	65.9 %	43.4 %	21.9 %	49.1 %	44.6 %	30.4 %
Term debt coverage ratio	1.77	1.61	1.70	1.01	1.93	1.46	2.13
Replacement coverage ratio	1.31	1.52	1.41	0.80	1.34	1.11	1.52
<b>Solvency (end of year at cost)</b>							
Number of sole proprietors	134	11	24	25	37	25	12
Total farm assets	1,987,640	290,087	654,674	880,519	2,014,838	3,121,565	6,069,963
Total farm liabilities	744,591	123,125	254,957	457,551	613,499	1,235,080	2,273,887
Total assets	2,253,448	345,104	783,920	997,858	2,390,119	3,481,638	6,577,501
Total liabilities	789,069	149,071	293,103	482,039	651,445	1,288,102	2,392,004
Net worth	1,464,379	196,032	490,817	515,820	1,738,675	2,193,536	4,185,497
Net worth change	76,053	17,947	37,624	11,140	80,394	76,082	327,971
Farm debt to asset ratio	37 %	42 %	39 %	52 %	30 %	40 %	37 %
Total debt to asset ratio	35 %	43 %	37 %	48 %	27 %	37 %	36 %
<b>Nonfarm Information</b>							
Net nonfarm income	33,198	37,953	43,967	21,458	42,543	15,397	43,352
Farms reporting living expenses	66	3	7	15	24	12	5
Total family living expense	62,302	-	42,238	50,053	57,573	92,469	99,030
<b>Crop Acres</b>							
Total acres owned	967	143	376	482	1,513	965	1,839
Total crop acres	1,952	186	550	1,021	1,532	2,750	5,775
Total crop acres owned	565	78	170	271	704	693	1,314
Total crop acres cash rented	1,299	95	315	646	768	1,992	4,229
Total crop acres share rented	87	12	65	105	60	65	231

**Financial Summary**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(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	31	22	24	38	31
<b>Income Statement</b>						
Gross cash farm income	955,323	386,244	963,766	1,303,612	1,338,351	779,247
Total cash farm expense	674,927	272,352	809,818	823,484	964,721	511,528
Net cash farm income	280,396	113,892	153,948	480,128	373,631	267,719
Inventory change	-69,538	-24,259	71,037	-154,000	-129,110	-76,167
Depreciation	-68,291	-29,399	-52,785	-94,152	-100,648	-58,503
Net farm income from operations	142,567	60,234	172,201	231,976	143,872	133,049
Gain or loss on capital sales	538	15	642	612	905	482
Average net farm income	143,105	60,249	172,843	232,588	144,776	133,531
Median net farm income	85,146	59,495	94,980	137,804	123,377	105,047
<b>Profitability (cost)</b>						
Rate of return on assets	4.7 %	5.2 %	7.8 %	7.2 %	3.0 %	4.1 %
Rate of return on equity	5.3 %	7.1 %	11.0 %	9.0 %	2.7 %	4.3 %
Operating profit margin	13.6 %	10.9 %	15.1 %	18.0 %	10.3 %	14.5 %
Asset turnover rate	34.8 %	47.9 %	51.8 %	39.9 %	29.0 %	28.6 %
<b>Liquidity &amp; Repayment (end of year)</b>						
Current assets	599,341	257,453	682,446	819,162	768,818	534,354
Current liabilities	309,389	136,074	409,870	427,596	432,749	189,510
Current ratio	1.94	1.89	1.67	1.92	1.78	2.82
Working capital	289,952	121,379	272,577	391,566	336,069	344,844
Working capital to gross inc	39.1 %	34.0 %	27.0 %	33.2 %	41.6 %	64.0 %
Term debt coverage ratio	1.77	1.68	2.31	2.29	1.30	2.05
Replacement coverage ratio	1.31	1.47	1.94	1.62	0.98	1.29
<b>Solvency (end of year at cost)</b>						
Number of sole proprietors	134	30	20	23	32	29
Total farm assets	1,987,640	747,431	1,767,536	2,877,960	2,760,973	1,862,964
Total farm liabilities	744,591	380,340	827,004	999,971	1,114,591	453,748
Total assets	2,253,448	823,243	1,978,333	3,241,661	3,070,711	2,237,142
Total liabilities	789,069	414,777	866,395	1,083,657	1,157,820	482,404
Net worth	1,464,379	408,467	1,111,938	2,158,004	1,912,891	1,754,738
Net worth change	76,053	40,148	118,551	124,198	65,708	57,121
Farm debt to asset ratio	37 %	51 %	47 %	35 %	40 %	24 %
Total debt to asset ratio	35 %	50 %	44 %	33 %	38 %	22 %
<b>Nonfarm Information</b>						
Net nonfarm income	33,198	28,897	28,417	22,808	30,551	52,181
Farms reporting living expenses	66	6	10	8	21	21
Total family living expense	62,302	41,914	58,220	82,334	65,680	59,061
<b>Crop Acres</b>						
Total acres owned	967	96	355	990	1,661	1,403
Total crop acres	1,952	934	1,931	2,486	2,626	1,743
Total crop acres owned	565	59	240	616	927	818
Total crop acres cash rented	1,299	821	1,587	1,863	1,554	824
Total crop acres share rented	87	53	104	7	145	101

**Financial Summary**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(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	85	8	36	15
<b>Income Statement</b>					
Gross cash farm income	955,323	1,143,845	344,563	640,958	629,737
Total cash farm expense	674,927	752,836	296,841	498,947	513,084
Net cash farm income	280,396	391,009	47,722	142,011	116,653
Inventory change	-69,538	-98,448	15,493	-26,507	10,926
Depreciation	-68,291	-88,875	-13,728	-40,091	-34,119
Net farm income from operations	142,567	203,685	49,487	75,413	93,460
Gain or loss on capital sales	538	608	-	356	43
Average net farm income	143,105	204,293	49,487	75,769	93,504
Median net farm income	85,146	128,792	34,606	66,024	59,495
<b>Profitability (cost)</b>					
Rate of return on assets	4.7 %	5.6 %	6.9 %	3.3 %	5.0 %
Rate of return on equity	5.3 %	6.5 %	10.2 %	3.1 %	5.3 %
Operating profit margin	13.6 %	15.7 %	23.8 %	10.9 %	12.7 %
Asset turnover rate	34.8 %	35.6 %	29.0 %	30.6 %	39.7 %
<b>Liquidity &amp; Repayment (end of year)</b>					
Current assets	599,341	737,811	240,298	508,198	298,880
Current liabilities	309,389	352,679	156,903	296,554	198,699
Current ratio	1.94	2.09	1.53	1.71	1.50
Working capital	289,952	385,132	83,396	211,643	100,181
Working capital to gross inc	39.1 %	43.9 %	23.5 %	33.8 %	18.0 %
Term debt coverage ratio	1.77	2.24	1.83	1.33	2.02
Replacement coverage ratio	1.31	1.53	1.83	1.12	1.48
<b>Solvency (end of year at cost)</b>					
Number of sole proprietors	134	76	8	36	13
Total farm assets	1,987,640	2,385,191	678,480	1,713,002	1,334,906
Total farm liabilities	744,591	850,242	367,972	676,365	566,199
Total assets	2,253,448	2,712,249	800,515	1,912,510	1,526,015
Total liabilities	789,069	903,252	453,976	705,769	579,503
Net worth	1,464,379	1,808,997	346,539	1,206,741	946,512
Net worth change	76,053	98,039	57,140	47,174	52,477
Farm debt to asset ratio	37 %	36 %	54 %	39 %	42 %
Total debt to asset ratio	35 %	33 %	57 %	37 %	38 %
<b>Nonfarm Information</b>					
Net nonfarm income	33,198	32,519	46,154	31,119	37,444
Farms reporting living expenses	66	44	2	17	2
Total family living expense	62,302	68,998	-	48,613	-
<b>Crop Acres</b>					
Total acres owned	967	959	234	1,097	1,081
Total crop acres	1,952	2,468	354	1,389	1,028
Total crop acres owned	565	666	97	546	280
Total crop acres cash rented	1,299	1,679	239	790	725
Total crop acres share rented	87	122	18	53	23

## 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, 2013**  
**(Farms Sorted By Net Return)**

**Barley on Owned Land**

	<u>Avg. Of All Farms</u>
Number of fields	14
Number of farms	11
Acres	272.57
Yield per acre (bu.)	71.82
Operators share of yield %	100.00
Value per bu.	6.25
Total product return per acre	448.98
Crop insurance per acre	10.13
Gross return per acre	459.11
<b>Direct Expenses</b>	
Seed	21.74
Fertilizer	76.72
Crop chemicals	30.50
Crop insurance	20.14
Drying expense	0.72
Fuel & oil	22.26
Repairs	21.59
Custom hire	5.60
Operating interest	2.30
Miscellaneous	0.26
Total direct expenses per acre	201.84
Return over direct exp per acre	257.27
<b>Overhead Expenses</b>	
Hired labor	7.83
Machinery leases	1.04
RE & pers. property taxes	6.17
Farm insurance	4.37
Utilities	2.66
Dues & professional fees	1.00
Interest	12.83
Mach & bldg depreciation	34.12
Miscellaneous	8.45
Total overhead expenses per acre	78.46
Total dir & ovhd expenses per acre	280.30
Net return per acre	178.81
Government payments	15.22
Net return with govt pmts	194.03
Labor & management charge	27.14
Net return over lbr & mgt	166.89
<b>Cost of Production</b>	
Total direct expense per bu.	2.81
Total dir & ovhd exp per bu.	3.90
Less govt & other income	3.55
With labor & management	3.93
Net value per unit	6.25
Machinery cost per acre	83.47
Est. labor hours per acre	1.21

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(Farms Sorted By Net Return)**

**Barley on Cash Rent**

	<u>Avg. Of All Farms</u>
Number of fields	19
Number of farms	18
Acres	437.88
Yield per acre (bu.)	75.41
Operators share of yield %	100.00
Value per bu.	6.55
Total product return per acre	494.28
Crop insurance per acre	11.95
Other crop income per acre	1.13
Gross return per acre	507.36
<b>Direct Expenses</b>	
Seed	20.53
Fertilizer	79.22
Crop chemicals	33.02
Crop insurance	15.16
Drying expense	0.33
Fuel & oil	18.25
Repairs	17.94
Custom hire	5.92
Land rent	62.69
Operating interest	1.11
Miscellaneous	0.53
Total direct expenses per acre	254.71
Return over direct exp per acre	252.65
<b>Overhead Expenses</b>	
Hired labor	9.05
Machinery leases	0.35
Farm insurance	4.76
Utilities	3.52
Dues & professional fees	2.35
Interest	0.69
Mach & bldg depreciation	32.44
Miscellaneous	7.11
Total overhead expenses per acre	60.27
Total dir & ovhd expenses per acre	314.98
Net return per acre	192.38
Government payments	11.26
Net return with govt pmts	203.65
Labor & management charge	22.11
Net return over lbr & mgt	181.54
<b>Cost of Production</b>	
Total direct expense per bu.	3.38
Total dir & ovhd exp per bu.	4.18
Less govt & other income	3.85
With labor & management	4.15
Net value per unit	6.55
Machinery cost per acre	73.13
Est. labor hours per acre	0.96

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(Farms Sorted By Net Return)**

**Beans, Pinto on Owned Land**

	<b>Avg. Of All Farms</b>
Number of fields	10
Number of farms	8
Acres	209.28
Yield per acre (cwt.)	18.77
Operators share of yield %	100.00
Value per cwt.	31.34
Total product return per acre	588.46
Crop insurance per acre	0.82
Gross return per acre	589.28
<b>Direct Expenses</b>	
Seed	49.62
Fertilizer	43.49
Crop chemicals	67.09
Crop insurance	19.51
Fuel & oil	24.27
Repairs	32.54
Custom hire	4.65
Operating interest	3.49
Miscellaneous	0.51
Total direct expenses per acre	245.17
Return over direct exp per acre	344.11
<b>Overhead Expenses</b>	
Hired labor	22.85
Machinery leases	2.24
RE & pers. property taxes	5.77
Farm insurance	8.08
Utilities	3.58
Dues & professional fees	3.69
Interest	15.60
Mach & bldg depreciation	44.98
Miscellaneous	10.94
Total overhead expenses per acre	117.74
Total dir & ovhd expenses per acre	362.91
Net return per acre	226.37
Government payments	12.50
Net return with govt pmts	238.87
Labor & management charge	29.66
Net return over lbr & mgt	209.21
<b>Cost of Production</b>	
Total direct expense per cwt.	13.06
Total dir & ovhd exp per cwt.	19.33
Less govt & other income	18.62
With labor & management	20.20
Net value per unit	31.34
Machinery cost per acre	109.53
Est. labor hours per acre	1.42

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(Farms Sorted By Net Return)**

**Beans, Pinto on Cash Rent**

	<b>Avg. Of All Farms</b>
Number of fields	14
Number of farms	10
Acres	363.81
Yield per acre (cwt.)	20.19
Operators share of yield %	100.00
Value per cwt.	35.39
Total product return per acre	714.46
Gross return per acre	714.46
<b>Direct Expenses</b>	
Seed	47.17
Fertilizer	48.90
Crop chemicals	60.14
Crop insurance	22.20
Fuel & oil	19.39
Repairs	28.01
Custom hire	10.05
Land rent	69.15
Operating interest	4.77
Miscellaneous	2.10
Total direct expenses per acre	311.89
Return over direct exp per acre	402.58
<b>Overhead Expenses</b>	
Hired labor	18.19
Machinery leases	4.45
Farm insurance	5.57
Utilities	4.53
Dues & professional fees	1.63
Interest	4.00
Mach & bldg depreciation	45.28
Miscellaneous	7.30
Total overhead expenses per acre	90.94
Total dir & ovhd expenses per acre	402.82
Net return per acre	311.64
Government payments	9.60
Net return with govt pmts	321.24
Labor & management charge	32.28
Net return over lbr & mgt	288.95
<b>Cost of Production</b>	
Total direct expense per cwt.	15.45
Total dir & ovhd exp per cwt.	19.95
Less govt & other income	19.48
With labor & management	21.08
Net value per unit	35.39
Machinery cost per acre	106.93
Est. labor hours per acre	1.31



**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(Farms Sorted By Net Return)**

**Canola on Cash Rent**

	<u>Avg. Of All Farms</u>
Number of fields	8
Number of farms	7
Acres	192.10
Yield per acre (cwt.)	17.45
Operators share of yield %	100.00
Value per cwt.	21.65
Total product return per acre	377.87
Crop insurance per acre	2.26
Gross return per acre	380.13
<b>Direct Expenses</b>	
Seed	49.55
Fertilizer	85.19
Crop chemicals	25.00
Crop insurance	12.67
Fuel & oil	14.23
Repairs	14.75
Custom hire	8.68
Land rent	47.29
Operating interest	3.95
Miscellaneous	0.67
Total direct expenses per acre	261.97
Return over direct exp per acre	118.16
<b>Overhead Expenses</b>	
Hired labor	6.72
Machinery leases	0.77
Farm insurance	2.68
Utilities	2.33
Dues & professional fees	0.21
Interest	2.91
Mach & bldg depreciation	22.41
Miscellaneous	4.17
Total overhead expenses per acre	42.19
Total dir & ovhd expenses per acre	304.17
Net return per acre	75.97
Government payments	12.55
Net return with govt pmts	88.52
Labor & management charge	19.11
Net return over lbr & mgt	69.41
<b>Cost of Production</b>	
Total direct expense per cwt.	15.01
Total dir & ovhd exp per cwt.	17.43
Less govt & other income	16.58
With labor & management	17.67
Net value per unit	21.65
Machinery cost per acre	62.83
Est. labor hours per acre	0.97

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(Farms Sorted By Net Return)**

**Corn on Owned Land**

	<u>Avg. Of</u> <u>All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of fields	52	10	11	10
Number of farms	47	9	10	10
Acres	223.25	209.35	187.85	218.82
Yield per acre (bu.)	107.98	90.79	100.37	115.23
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	3.87	3.66	3.85	4.20
Total product return per acre	417.69	332.15	386.89	483.65
Crop insurance per acre	28.91	5.68	34.47	87.82
Other crop income per acre	1.42	-	7.99	-
Gross return per acre	448.02	337.83	429.35	571.47
<b>Direct Expenses</b>				
Seed	86.89	90.21	82.06	95.48
Fertilizer	123.12	114.42	133.67	107.66
Crop chemicals	21.89	19.43	22.98	18.91
Crop insurance	25.10	26.07	31.95	19.18
Drying expense	17.66	9.08	20.88	17.09
Fuel & oil	28.05	31.94	21.98	23.54
Repairs	28.77	46.78	25.18	24.23
Custom hire	7.91	11.64	5.48	6.12
Operating interest	5.70	9.23	3.49	3.06
Miscellaneous	0.63	-	2.92	-
Total direct expenses per acre	345.71	358.81	350.60	315.27
Return over direct exp per acre	102.31	-20.99	78.75	256.20
<b>Overhead Expenses</b>				
Hired labor	11.85	19.43	6.21	13.22
Machinery leases	2.07	0.34	3.90	4.13
Building leases	0.78	0.25	0.03	0.21
RE & pers. property taxes	6.95	6.29	7.56	6.88
Farm insurance	4.73	5.86	7.00	3.71
Utilities	3.77	3.37	4.05	3.91
Dues & professional fees	1.80	2.18	0.83	1.18
Interest	24.77	31.76	16.32	22.67
Mach & bldg depreciation	53.55	52.04	49.55	45.44
Miscellaneous	6.32	10.05	8.22	4.33
Total overhead expenses per acre	116.59	131.57	103.67	105.68
Total dir & ovhd expenses per acre	462.31	490.38	454.26	420.95
Net return per acre	-14.28	-152.56	-24.92	150.52
Government payments	10.63	9.55	9.33	12.99
Net return with govt pmts	-3.65	-143.00	-15.58	163.51
Labor & management charge	37.69	36.72	35.79	40.47
Net return over lbr & mgt	-41.34	-179.73	-51.37	123.04
<b>Cost of Production</b>				
Total direct expense per bu.	3.20	3.95	3.49	2.74
Total dir & ovhd exp per bu.	4.28	5.40	4.53	3.65
Less govt & other income	3.90	5.23	4.01	2.78
With labor & management	4.25	5.64	4.37	3.13
Net value per unit	3.87	3.66	3.85	4.20
Machinery cost per acre	119.42	145.11	103.89	101.22
Est. labor hours per acre	1.86	2.02	1.62	1.63

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(Farms Sorted By Net Return)**

**Corn on Cash Rent**

	<u>Avg. Of</u> <u>All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of fields	85	18	17	20
Number of farms	64	12	13	13
Acres	442.74	372.24	371.24	364.06
Yield per acre (bu.)	110.60	108.30	109.30	117.73
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	3.82	3.66	3.81	4.09
Total product return per acre	422.99	395.90	416.02	481.83
Crop insurance per acre	40.24	8.33	35.76	66.82
Other crop income per acre	1.01	-	0.48	1.69
Gross return per acre	464.24	404.23	452.26	550.34
<b>Direct Expenses</b>				
Seed	91.17	103.41	94.84	85.48
Fertilizer	120.21	143.40	111.02	113.42
Crop chemicals	25.38	21.11	21.81	23.06
Crop insurance	22.34	25.25	20.45	21.15
Drying expense	13.27	26.35	14.87	12.56
Fuel & oil	28.54	30.79	29.41	19.15
Repairs	38.07	42.29	37.44	28.57
Custom hire	7.50	14.20	3.87	6.46
Land rent	68.01	72.42	73.04	62.88
Operating interest	5.92	9.78	4.21	3.39
Miscellaneous	1.53	1.70	0.16	0.56
Total direct expenses per acre	421.94	490.70	411.14	376.68
Return over direct exp per acre	42.30	-86.47	41.12	173.67
<b>Overhead Expenses</b>				
Hired labor	18.10	21.90	16.92	14.60
Machinery leases	4.89	1.86	5.13	8.44
Building leases	0.47	0.21	0.14	0.58
Farm insurance	4.77	5.19	3.98	3.63
Utilities	3.70	3.49	3.54	5.47
Dues & professional fees	1.31	2.09	0.86	0.44
Interest	3.81	6.24	3.59	1.90
Mach & bldg depreciation	49.49	59.40	53.53	33.24
Miscellaneous	5.59	7.19	6.13	5.42
Total overhead expenses per acre	92.14	107.57	93.83	73.71
Total dir & ovhd expenses per acre	514.08	598.27	504.96	450.39
Net return per acre	-49.84	-194.04	-52.70	99.96
Government payments	10.72	7.77	12.55	14.16
Net return with govt pmts	-39.11	-186.27	-40.16	114.11
Labor & management charge	34.81	37.33	36.05	35.90
Net return over lbr & mgt	-73.93	-223.60	-76.20	78.21
<b>Cost of Production</b>				
Total direct expense per bu.	3.81	4.53	3.76	3.20
Total dir & ovhd exp per bu.	4.65	5.52	4.62	3.83
Less govt & other income	4.18	5.38	4.17	3.12
With labor & management	4.49	5.72	4.50	3.43
Net value per unit	3.82	3.66	3.81	4.09
Machinery cost per acre	128.81	149.90	128.90	95.03
Est. labor hours per acre	1.72	2.16	1.60	1.33

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(Farms Sorted By Net Return)**

**Corn Silage on Owned Land**

	<b>Avg. Of All Farms</b>
Number of fields	12
Number of farms	12
Acres	87.09
Yield per acre (ton)	12.96
Operators share of yield %	100.00
Value per ton	31.42
Total product return per acre	407.16
Crop insurance per acre	109.70
Gross return per acre	516.86
<b>Direct Expenses</b>	
Seed	84.14
Fertilizer	118.75
Crop chemicals	20.31
Crop insurance	24.16
Fuel & oil	26.70
Repairs	23.68
Custom hire	37.49
Operating interest	5.66
Total direct expenses per acre	340.90
Return over direct exp per acre	175.96
<b>Overhead Expenses</b>	
Hired labor	6.88
Machinery leases	2.01
Building leases	0.53
RE & pers. property taxes	7.66
Farm insurance	4.49
Utilities	3.56
Dues & professional fees	0.99
Interest	40.89
Mach & bldg depreciation	35.12
Miscellaneous	4.55
Total overhead expenses per acre	106.68
Total dir & ovhd expenses per acre	447.58
Net return per acre	69.28
Government payments	14.07
Net return with govt pmts	83.35
Labor & management charge	31.22
Net return over lbr & mgt	52.12
<b>Cost of Production</b>	
Total direct expense per ton	26.31
Total dir & ovhd exp per ton	34.54
Less govt & other income	24.99
With labor & management	27.40
Net value per unit	31.42
Machinery cost per acre	124.33
Est. labor hours per acre	2.34

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(Farms Sorted By Net Return)**

**Corn Silage on Cash Rent**

	<b>Avg. Of All Farms</b>
Number of fields	14
Number of farms	14
Acres	89.74
Yield per acre (ton)	13.89
Operators share of yield %	100.00
Value per ton	36.55
Total product return per acre	507.59
Crop insurance per acre	47.99
Gross return per acre	555.58
<b>Direct Expenses</b>	
Seed	88.71
Fertilizer	95.30
Crop chemicals	29.94
Crop insurance	21.69
Fuel & oil	29.98
Repairs	47.34
Custom hire	19.77
Land rent	71.34
Operating interest	8.04
Total direct expenses per acre	412.11
Return over direct exp per acre	143.46
<b>Overhead Expenses</b>	
Hired labor	18.37
Machinery leases	8.40
Building leases	0.34
Farm insurance	5.09
Utilities	2.29
Dues & professional fees	1.42
Interest	7.75
Mach & bldg depreciation	35.51
Miscellaneous	1.85
Total overhead expenses per acre	81.02
Total dir & ovhd expenses per acre	493.14
Net return per acre	62.44
Government payments	10.88
Net return with govt pmts	73.32
Labor & management charge	21.80
Net return over lbr & mgt	51.52
<b>Cost of Production</b>	
Total direct expense per ton	29.68
Total dir & ovhd exp per ton	35.51
Less govt & other income	31.27
With labor & management	32.84
Net value per unit	36.55
Machinery cost per acre	145.35
Est. labor hours per acre	1.96

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(Farms Sorted By Net Return)**

**CRP on Owned Land**

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	<b>Avg. Of All Farms</b>
Number of fields	18
Number of farms	17
Acres	183.24
Yield per acre (\$)	51.39
Operators share of yield %	100.00
Value per \$	1.00
Total product return per acre	51.39
Gross return per acre	51.39
<b>Direct Expenses</b>	
Fuel & oil	0.53
Repairs	0.70
Total direct expenses per acre	1.52
Return over direct exp per acre	49.87
<b>Overhead Expenses</b>	
RE & pers. property taxes	6.85
Farm insurance	1.08
Interest	11.83
Mach & bldg depreciation	1.01
Miscellaneous	0.85
Total overhead expenses per acre	21.62
Total dir & ovhd expenses per acre	23.14
Net return per acre	28.25

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(Farms Sorted By Net Return)**

**Hay, Alfalfa on Owned Land**

	<b>Avg. Of All Farms</b>
Number of fields	13
Number of farms	13
Acres	65.98
Yield per acre (ton)	1.77
Operators share of yield %	100.00
Value per ton	74.99
Total product return per acre	132.87
Crop insurance per acre	1.54
Gross return per acre	134.41
<b>Direct Expenses</b>	
Seed	3.08
Fertilizer	3.06
Crop insurance	1.34
Fuel & oil	15.22
Repairs	13.72
Custom hire	1.81
Operating interest	1.42
Miscellaneous	1.13
Total direct expenses per acre	40.80
Return over direct exp per acre	93.61
<b>Overhead Expenses</b>	
Custom hire	1.23
Hired labor	3.30
Machinery leases	0.76
RE & pers. property taxes	5.89
Farm insurance	4.84
Utilities	4.10
Dues & professional fees	0.82
Interest	16.12
Mach & bldg depreciation	23.86
Miscellaneous	4.76
Total overhead expenses per acre	65.68
Total dir & ovhd expenses per acre	106.48
Net return per acre	27.92
Government payments	9.13
Net return with govt pmts	37.05
Labor & management charge	21.34
Net return over lbr & mgt	15.71
<b>Cost of Production</b>	
Total direct expense per ton	23.03
Total dir & ovhd exp per ton	60.10
Less govt & other income	54.07
With labor & management	66.12
Net value per unit	74.99
Machinery cost per acre	55.76
Est. labor hours per acre	1.48

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(Farms Sorted By Net Return)**

**Hay, Alfalfa on Cash Rent**

	<b>Avg. Of All Farms</b>
Number of fields	13
Number of farms	13
Acres	69.30
Yield per acre (ton)	2.38
Operators share of yield %	100.00
Value per ton	82.88
Total product return per acre	197.17
Crop insurance per acre	1.64
Gross return per acre	198.81
<b>Direct Expenses</b>	
Seed	4.24
Fertilizer	3.20
Crop insurance	2.91
Fuel & oil	16.71
Repairs	19.13
Custom hire	3.35
Land rent	48.92
Operating interest	2.32
Miscellaneous	2.36
Total direct expenses per acre	103.14
Return over direct exp per acre	95.68
<b>Overhead Expenses</b>	
Hired labor	7.57
Machinery leases	3.11
Farm insurance	3.91
Utilities	3.11
Dues & professional fees	1.23
Interest	2.02
Mach & bldg depreciation	26.03
Miscellaneous	1.51
Total overhead expenses per acre	48.50
Total dir & ovhd expenses per acre	151.63
Net return per acre	47.18
Government payments	12.15
Net return with govt pmts	59.33
Labor & management charge	20.46
Net return over lbr & mgt	38.87
<b>Cost of Production</b>	
Total direct expense per ton	43.35
Total dir & ovhd exp per ton	63.73
Less govt & other income	57.94
With labor & management	66.54
Net value per unit	82.88
Machinery cost per acre	67.30
Est. labor hours per acre	1.49



**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(Farms Sorted By Net Return)**

**Hay, Grass on Owned Land**

	<u>Avg. Of All Farms</u>
Number of fields	9
Number of farms	9
Acres	172.61
Yield per acre (ton)	1.75
Operators share of yield %	100.00
Value per ton	45.17
Total product return per acre	79.20
Gross return per acre	79.20
<b>Direct Expenses</b>	
Fuel & oil	11.02
Repairs	9.50
Custom hire	3.25
Operating interest	2.28
Miscellaneous	2.83
Total direct expenses per acre	28.87
Return over direct exp per acre	50.33
<b>Overhead Expenses</b>	
Hired labor	5.62
Machinery leases	0.72
Building leases	0.64
RE & pers. property taxes	3.22
Farm insurance	1.09
Utilities	0.90
Dues & professional fees	0.42
Interest	13.78
Mach & bldg depreciation	18.17
Miscellaneous	2.00
Total overhead expenses per acre	46.55
Total dir & ovhd expenses per acre	75.42
Net return per acre	3.78
Government payments	-
Net return with govt pmts	3.78
Labor & management charge	12.66
Net return over lbr & mgt	-8.88
<b>Cost of Production</b>	
Total direct expense per ton	16.46
Total dir & ovhd exp per ton	43.01
Less govt & other income	43.01
With labor & management	50.23
Net value per unit	45.17
Machinery cost per acre	41.92
Est. labor hours per acre	0.95

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(Farms Sorted By Net Return)**

**Hay, Grass on Cash Rent**

	<b>Avg. Of All Farms</b>
Number of fields	14
Number of farms	10
Acres	300.81
Yield per acre (ton)	1.51
Operators share of yield %	100.00
Value per ton	56.21
Total product return per acre	84.74
Gross return per acre	84.74
<b>Direct Expenses</b>	
Fuel & oil	12.21
Repairs	12.80
Custom hire	2.71
Land rent	15.51
Operating interest	2.17
Miscellaneous	2.20
Total direct expenses per acre	47.60
Return over direct exp per acre	37.15
<b>Overhead Expenses</b>	
Hired labor	9.98
Farm insurance	1.30
Utilities	0.93
Dues & professional fees	0.48
Interest	1.46
Mach & bldg depreciation	14.62
Miscellaneous	2.19
Total overhead expenses per acre	30.96
Total dir & ovhd expenses per acre	78.56
Net return per acre	6.18
Government payments	-
Net return with govt pmts	6.18
Labor & management charge	13.52
Net return over lbr & mgt	-7.34
<b>Cost of Production</b>	
Total direct expense per ton	31.57
Total dir & ovhd exp per ton	52.11
Less govt & other income	52.11
With labor & management	61.07
Net value per unit	56.21
Machinery cost per acre	43.14
Est. labor hours per acre	1.09

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(Farms Sorted By Net Return)**

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

	<b>Avg. Of All Farms</b>
Number of fields	18
Number of farms	13
Acres	91.62
Yield per acre (ton)	1.59
Operators share of yield %	100.00
Value per ton	62.14
Total product return per acre	98.68
Crop insurance per acre	1.19
Gross return per acre	99.86
<b>Direct Expenses</b>	
Fertilizer	9.07
Crop insurance	1.60
Fuel & oil	9.55
Repairs	11.99
Custom hire	2.07
Operating interest	1.75
Miscellaneous	0.33
Total direct expenses per acre	36.36
Return over direct exp per acre	63.50
<b>Overhead Expenses</b>	
Custom hire	0.90
Hired labor	4.02
Machinery leases	0.78
RE & pers. property taxes	4.83
Farm insurance	3.20
Utilities	3.06
Dues & professional fees	0.17
Interest	13.07
Mach & bldg depreciation	16.08
Miscellaneous	3.97
Total overhead expenses per acre	50.08
Total dir & ovhd expenses per acre	86.43
Net return per acre	13.43
Government payments	4.30
Net return with govt pmts	17.73
Labor & management charge	15.25
Net return over lbr & mgt	2.47
<b>Cost of Production</b>	
Total direct expense per ton	22.90
Total dir & ovhd exp per ton	54.43
Less govt & other income	50.98
With labor & management	60.58
Net value per unit	62.14
Machinery cost per acre	42.18
Est. labor hours per acre	1.05

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(Farms Sorted By Net Return)**

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

	<b>Avg. Of All Farms</b>
Number of fields	21
Number of farms	17
Acres	174.03
Yield per acre (ton)	1.55
Operators share of yield %	100.00
Value per ton	60.55
Total product return per acre	94.02
Crop insurance per acre	0.40
Gross return per acre	94.42
<b>Direct Expenses</b>	
Fertilizer	1.68
Crop insurance	0.54
Fuel & oil	9.26
Repairs	12.12
Custom hire	0.37
Land rent	16.14
Operating interest	2.30
Miscellaneous	0.76
Total direct expenses per acre	43.18
Return over direct exp per acre	51.24
<b>Overhead Expenses</b>	
Custom hire	0.16
Hired labor	2.24
Machinery leases	0.76
Building leases	0.11
Farm insurance	3.07
Utilities	2.68
Dues & professional fees	0.22
Interest	3.47
Mach & bldg depreciation	14.45
Miscellaneous	2.86
Total overhead expenses per acre	30.01
Total dir & ovhd expenses per acre	73.19
Net return per acre	21.23
Government payments	3.75
Net return with govt pmts	24.98
Labor & management charge	14.79
Net return over lbr & mgt	10.19
<b>Cost of Production</b>	
Total direct expense per ton	27.81
Total dir & ovhd exp per ton	47.14
Less govt & other income	44.47
With labor & management	53.99
Net value per unit	60.55
Machinery cost per acre	39.24
Est. labor hours per acre	0.99

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(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	37	6	7	9
Number of farms	34	6	7	7
Acres	428.46	482.67	338.64	404.30
Yield per acre (aum)	0.97	1.11	0.92	1.13
Operators share of yield %	100.00	100.00	100.00	100.00
Value per aum	22.10	21.81	20.86	23.43
Total product return per acre	21.50	24.12	19.21	26.52
Crop insurance per acre	0.30	-	1.94	-
Gross return per acre	21.80	24.12	21.15	26.52
<b>Direct Expenses</b>				
Fuel & oil	0.50	0.58	0.58	0.40
Repairs	0.56	0.70	0.81	0.45
Total direct expenses per acre	1.35	1.43	1.94	1.21
Return over direct exp per acre	20.45	22.69	19.21	25.31
<b>Overhead Expenses</b>				
RE & pers. property taxes	2.75	4.12	3.15	2.36
Farm insurance	0.29	0.56	0.83	0.08
Dues & professional fees	0.15	0.68	0.01	0.01
Interest	7.37	25.02	2.66	1.39
Mach & bldg depreciation	0.69	0.34	0.95	0.49
Miscellaneous	0.86	0.83	1.64	0.80
Total overhead expenses per acre	12.11	31.56	9.25	5.13
Total dir & ovhd expenses per acre	13.45	32.99	11.18	6.33
Net return per acre	8.35	-8.86	9.97	20.19

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(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	51	9	9	10
Number of farms	42	8	9	9
Acres	748.21	625.46	875.28	479.00
Yield per acre (aum)	0.95	0.89	0.84	1.26
Operators share of yield %	100.00	100.00	100.00	100.00
Value per aum	19.41	22.46	19.28	19.66
Total product return per acre	18.42	19.94	16.25	24.80
Crop insurance per acre	0.30	-	1.39	-
Gross return per acre	18.71	19.94	17.64	24.80
<b>Direct Expenses</b>				
Repairs	0.55	0.57	0.52	0.40
Land rent	14.25	21.85	13.54	10.00
Total direct expenses per acre	15.50	22.91	15.13	11.00
Return over direct exp per acre	3.21	-2.97	2.52	13.80
<b>Overhead Expenses</b>				
Farm insurance	0.26	0.71	0.10	0.55
Dues & professional fees	0.21	0.64	0.03	0.75
Mach & bldg depreciation	0.76	0.32	0.99	0.84
Miscellaneous	0.84	1.56	0.53	0.91
Total overhead expenses per acre	2.08	3.23	1.65	3.05
Total dir & ovhd expenses per acre	17.57	26.14	16.78	14.05
Net return per acre	1.14	-6.20	0.86	10.75

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(Farms Sorted By Net Return)**

**Prevented planting on Cash Rent**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of fields	54	15	9	11
Number of farms	41	8	8	9
Acres	259.44	185.90	215.82	239.48
Yield per acre	-	-	-	-
Operators share of yield %	-	-	-	-
Value	-	-	-	-
Total product return per acre	-	-	-	-
Crop insurance per acre	182.13	126.38	190.22	241.81
Gross return per acre	182.13	126.38	190.22	241.81
<b>Direct Expenses</b>				
Seed	2.95	9.65	-	-
Fertilizer	0.68	1.74	-	-
Crop chemicals	9.44	4.35	13.26	3.56
Crop insurance	18.14	10.59	17.14	22.61
Fuel & oil	6.44	8.36	6.37	5.54
Repairs	7.35	7.57	6.07	6.70
Custom hire	1.93	-	-	4.91
Land rent	62.38	73.57	58.81	54.16
Machinery leases	0.39	-	2.83	-
Operating interest	1.08	0.64	1.23	0.70
Total direct expenses per acre	110.79	116.47	105.71	98.18
Return over direct exp per acre	71.35	9.91	84.51	143.63
<b>Overhead Expenses</b>				
Hired labor	3.07	6.07	4.22	2.27
Machinery leases	0.40	0.01	1.15	0.09
Farm insurance	4.87	7.15	3.91	4.65
Utilities	3.05	2.43	3.82	3.45
Dues & professional fees	1.69	3.58	0.63	2.06
Interest	3.23	2.22	2.32	1.71
Mach & bldg depreciation	11.81	14.63	9.71	8.36
Miscellaneous	6.22	9.06	8.17	5.81
Total overhead expenses per acre	34.34	45.14	33.92	28.40
Total dir & ovhd expenses per acre	145.13	161.62	139.63	126.58
Net return per acre	37.01	-35.23	50.58	115.23
Government payments	12.55	10.74	15.34	12.71
Net return with govt pmts	49.55	-24.49	65.93	127.94
Labor & management charge	8.78	9.33	8.85	6.23
Net return over lbr & mgt	40.78	-33.82	57.07	121.71

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(Farms Sorted By Net Return)**

**Soybeans on Owned Land**

	<u>Avg. Of</u> <u>All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of fields	65	10	13	11
Number of farms	51	10	10	11
Acres	307.29	246.12	197.27	433.40
Yield per acre (bu.)	32.14	21.66	33.14	39.33
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	12.42	12.29	12.40	12.48
Total product return per acre	399.05	266.22	410.88	490.61
Hedging gains/losses per acre	-0.14	-1.16	-	-
Crop insurance per acre	8.48	20.67	17.03	0.53
Other crop income per acre	0.94	2.84	-	-
Gross return per acre	408.33	288.56	427.91	491.15
<b>Direct Expenses</b>				
Seed	67.63	66.17	71.82	60.06
Fertilizer	18.35	36.46	7.88	13.60
Crop chemicals	22.48	31.42	22.86	21.09
Crop insurance	18.65	18.61	20.01	17.20
Fuel & oil	19.52	22.06	19.54	17.49
Repairs	22.10	44.45	23.70	18.98
Custom hire	7.05	6.98	11.53	2.62
Hired labor	0.31	2.55	-	-
Operating interest	4.10	7.24	4.97	2.23
Miscellaneous	0.75	0.18	1.20	1.17
Total direct expenses per acre	180.95	236.13	183.50	154.43
Return over direct exp per acre	227.39	52.43	244.41	336.71
<b>Overhead Expenses</b>				
Hired labor	8.49	16.00	10.37	5.62
Machinery leases	1.97	6.87	6.02	1.08
Building leases	0.25	-	0.02	0.72
RE & pers. property taxes	7.62	10.43	5.86	7.50
Farm insurance	4.83	5.43	3.05	4.83
Utilities	3.24	3.35	3.96	2.99
Dues & professional fees	1.14	1.36	0.79	0.97
Interest	19.57	25.29	32.85	13.12
Mach & bldg depreciation	34.26	19.78	29.05	40.86
Miscellaneous	6.96	2.50	7.64	4.32
Total overhead expenses per acre	88.33	91.00	99.60	82.00
Total dir & ovhd expenses per acre	269.27	327.13	283.11	236.43
Net return per acre	139.06	-38.56	144.81	254.72
Government payments	10.65	10.74	18.36	7.93
Net return with govt pmts	149.71	-27.83	163.16	262.65
Labor & management charge	25.24	20.42	29.75	23.38
Net return over lbr & mgt	124.48	-48.25	133.41	239.27
<b>Cost of Production</b>				
Total direct expense per bu.	5.63	10.90	5.54	3.93
Total dir & ovhd exp per bu.	8.38	15.10	8.54	6.01
Less govt & other income	7.76	13.57	7.47	5.80
With labor & management	8.54	14.52	8.37	6.39
Net value per unit	12.41	12.23	12.40	12.48
Machinery cost per acre	86.07	103.81	88.59	78.88
Est. labor hours per acre	1.27	1.62	1.76	0.82



**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(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	119	15	25	20
Number of farms	71	14	14	15
Acres	461.67	505.07	550.58	654.33
Yield per acre (bu.)	31.92	21.20	32.15	38.29
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	12.32	12.44	12.09	12.45
Total product return per acre	393.10	263.65	388.59	476.65
Hedging gains/losses per acre	-0.04	-	-	-
Crop insurance per acre	11.84	22.73	9.49	12.15
Other crop income per acre	0.35	-	-	-
Gross return per acre	405.25	286.38	398.08	488.80
<b>Direct Expenses</b>				
Seed	69.41	72.85	64.57	64.99
Fertilizer	19.57	27.54	24.50	11.19
Crop chemicals	19.93	26.86	16.95	19.84
Crop insurance	17.83	20.50	19.43	13.06
Fuel & oil	17.65	19.54	19.13	17.49
Repairs	21.58	27.11	19.61	19.98
Custom hire	5.13	7.07	5.07	2.35
Land rent	68.54	68.91	66.36	68.65
Machinery leases	0.78	-	3.08	0.06
Operating interest	3.40	7.57	2.36	2.06
Miscellaneous	0.86	0.35	0.37	0.30
Total direct expenses per acre	244.68	278.30	241.43	219.96
Return over direct exp per acre	160.57	8.08	156.66	268.83
<b>Overhead Expenses</b>				
Hired labor	10.45	8.27	11.14	10.91
Machinery leases	1.69	3.06	0.29	1.84
Farm insurance	4.39	3.50	4.45	3.67
Utilities	3.22	4.60	2.92	3.34
Dues & professional fees	1.23	1.38	2.02	0.53
Interest	3.11	4.94	2.57	1.58
Mach & bldg depreciation	31.71	18.39	31.39	36.36
Miscellaneous	5.76	4.84	6.41	4.71
Total overhead expenses per acre	61.57	48.99	61.18	62.94
Total dir & ovhd expenses per acre	306.25	327.28	302.61	282.90
Net return per acre	99.00	-40.90	95.48	205.89
Government payments	9.79	10.14	10.44	10.81
Net return with govt pmts	108.79	-30.76	105.91	216.70
Labor & management charge	23.48	19.96	21.77	25.26
Net return over lbr & mgt	85.31	-50.72	84.15	191.45
<b>Cost of Production</b>				
Total direct expense per bu.	7.67	13.13	7.51	5.74
Total dir & ovhd exp per bu.	9.59	15.44	9.41	7.39
Less govt & other income	8.91	13.89	8.79	6.79
With labor & management	9.64	14.83	9.47	7.45
Net value per unit	12.31	12.44	12.09	12.45
Machinery cost per acre	78.98	78.91	80.03	75.66
Est. labor hours per acre	1.06	1.28	0.92	0.82

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(Farms Sorted By Net Return)**

**Soybeans on Share Rent**

	<u>Avg. Of All Farms</u>
Number of fields	14
Number of farms	13
Acres	285.28
Yield per acre (bu.)	30.96
Operators share of yield %	70.18
Value per bu.	12.33
Total product return per acre	267.97
Crop insurance per acre	4.16
Gross return per acre	272.12
<b>Direct Expenses</b>	
Seed	78.07
Fertilizer	13.38
Crop chemicals	15.64
Crop insurance	15.00
Fuel & oil	15.59
Repairs	18.82
Custom hire	5.83
Machinery leases	0.22
Operating interest	3.54
Total direct expenses per acre	166.10
Return over direct exp per acre	106.03
<b>Overhead Expenses</b>	
Hired labor	10.29
Building leases	0.54
Farm insurance	5.08
Utilities	3.21
Dues & professional fees	1.01
Interest	3.37
Mach & bldg depreciation	25.81
Miscellaneous	9.65
Total overhead expenses per acre	58.95
Total dir & ovhd expenses per acre	225.05
Net return per acre	47.08
Government payments	7.44
Net return with govt pmts	54.52
Labor & management charge	23.08
Net return over lbr & mgt	31.43
<b>Cost of Production</b>	
Total direct expense per bu.	7.65
Total dir & ovhd exp per bu.	10.36
Less govt & other income	9.82
With labor & management	10.89
Net value per unit	12.33
Machinery cost per acre	69.01
Est. labor hours per acre	1.10

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(Farms Sorted By Net Return)**

**Sunflowers on Owned Land**

	<b>Avg. Of All Farms</b>
Number of fields	6
Number of farms	6
Acres	148.99
Yield per acre (cwt.)	14.83
Operators share of yield %	100.00
Value per cwt.	20.06
Total product return per acre	297.49
Gross return per acre	297.49
<b>Direct Expenses</b>	
Seed	36.04
Fertilizer	67.61
Crop chemicals	39.55
Crop insurance	18.93
Drying expense	0.62
Fuel & oil	13.07
Repairs	19.56
Custom hire	12.61
Operating interest	2.50
Total direct expenses per acre	210.49
Return over direct exp per acre	87.00
<b>Overhead Expenses</b>	
Hired labor	7.99
Machinery leases	2.48
RE & pers. property taxes	4.96
Farm insurance	3.39
Utilities	3.09
Dues & professional fees	0.92
Interest	10.85
Mach & bldg depreciation	24.04
Miscellaneous	4.92
Total overhead expenses per acre	62.64
Total dir & ovhd expenses per acre	273.13
Net return per acre	24.36
Government payments	17.69
Net return with govt pmts	42.05
Labor & management charge	24.45
Net return over lbr & mgt	17.59
<b>Cost of Production</b>	
Total direct expense per cwt.	14.19
Total dir & ovhd exp per cwt.	18.42
Less govt & other income	17.22
With labor & management	18.87
Net value per unit	20.06
Machinery cost per acre	71.25
Est. labor hours per acre	1.38

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(Farms Sorted By Net Return)**

**Sunflowers on Cash Rent**

	<b>Avg. Of All Farms</b>
Number of fields	18
Number of farms	11
Acres	178.32
Yield per acre (cwt.)	9.04
Operators share of yield %	100.00
Value per cwt.	23.35
Total product return per acre	210.95
Crop insurance per acre	90.94
Other crop income per acre	2.18
Gross return per acre	304.07
<b>Direct Expenses</b>	
Seed	38.87
Fertilizer	56.91
Crop chemicals	38.70
Crop insurance	15.85
Drying expense	0.61
Fuel & oil	14.20
Repairs	18.59
Custom hire	13.69
Land rent	38.57
Operating interest	6.17
Miscellaneous	0.36
Total direct expenses per acre	242.52
Return over direct exp per acre	61.55
<b>Overhead Expenses</b>	
Hired labor	5.80
Machinery leases	2.60
Farm insurance	2.74
Utilities	3.39
Dues & professional fees	0.13
Interest	2.68
Mach & bldg depreciation	22.52
Miscellaneous	5.05
Total overhead expenses per acre	44.91
Total dir & ovhd expenses per acre	287.44
Net return per acre	16.63
Government payments	14.64
Net return with govt pmts	31.27
Labor & management charge	20.07
Net return over lbr & mgt	11.20
<b>Cost of Production</b>	
Total direct expense per cwt.	26.84
Total dir & ovhd exp per cwt.	31.81
Less govt & other income	19.89
With labor & management	22.11
Net value per unit	23.35
Machinery cost per acre	72.06
Est. labor hours per acre	1.19

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(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	42	6	7	12
Number of farms	33	6	6	7
Acres	250.75	214.99	274.20	287.26
Yield per acre (bu.)	55.71	41.55	48.26	66.04
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	6.61	6.21	6.33	6.73
Total product return per acre	368.12	258.11	305.57	444.39
Hedging gains/losses per acre	0.81	-	-	-
Crop insurance per acre	5.48	7.16	4.03	9.61
Other crop income per acre	0.56	-	-	0.06
Gross return per acre	374.98	265.27	309.59	454.06
<b>Direct Expenses</b>				
Seed	24.29	25.04	20.83	23.10
Fertilizer	82.21	84.41	76.21	84.95
Crop chemicals	35.46	36.38	32.06	37.17
Crop insurance	15.87	10.08	15.28	17.73
Drying expense	0.62	-	0.72	1.48
Fuel & oil	16.46	13.15	16.79	16.79
Repairs	21.72	25.15	16.43	17.72
Custom hire	10.89	25.56	24.76	4.21
Operating interest	1.66	0.70	0.91	1.46
Miscellaneous	0.99	-	3.30	-
Total direct expenses per acre	210.17	220.48	207.29	204.62
Return over direct exp per acre	164.80	44.79	102.31	249.44
<b>Overhead Expenses</b>				
Hired labor	8.71	4.58	2.07	13.39
Machinery leases	1.02	0.91	0.08	2.25
Building leases	0.13	-	0.68	0.02
RE & pers. property taxes	5.56	6.98	5.62	4.94
Farm insurance	4.03	3.33	3.48	3.36
Utilities	3.08	2.26	3.33	3.19
Dues & professional fees	1.09	0.38	0.07	1.18
Interest	11.02	18.66	8.90	8.26
Mach & bldg depreciation	32.25	31.10	29.27	34.76
Miscellaneous	5.36	6.79	2.99	7.07
Total overhead expenses per acre	72.25	74.99	56.49	78.41
Total dir & ovhd expenses per acre	282.42	295.47	263.77	283.03
Net return per acre	92.56	-30.20	45.82	171.03
Government payments	12.08	11.46	10.31	12.97
Net return with govt pmts	104.63	-18.74	56.13	184.00
Labor & management charge	25.53	26.53	22.51	26.31
Net return over lbr & mgt	79.10	-45.27	33.63	157.69
<b>Cost of Production</b>				
Total direct expense per bu.	3.77	5.31	4.30	3.10
Total dir & ovhd exp per bu.	5.07	7.11	5.47	4.29
Less govt & other income	4.73	6.66	5.17	3.94
With labor & management	5.19	7.30	5.63	4.34
Net value per unit	6.62	6.21	6.33	6.73
Machinery cost per acre	81.76	94.67	87.21	73.69
Est. labor hours per acre	1.19	1.50	1.10	0.97

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
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**(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	81	7	25	25
Number of farms	36	7	7	8
Acres	273.29	320.78	282.51	203.84
Yield per acre (bu.)	56.66	42.32	54.72	65.66
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	6.59	5.99	6.55	7.00
Total product return per acre	373.14	253.31	358.54	459.72
Hedging gains/losses per acre	0.24	-	-	1.06
Crop insurance per acre	2.23	1.94	5.04	-
Other crop income per acre	0.18	-	0.18	0.51
Gross return per acre	375.79	255.25	363.76	461.29
<b>Direct Expenses</b>				
Seed	23.45	20.90	20.80	22.58
Fertilizer	86.05	80.00	94.59	91.18
Crop chemicals	34.35	30.89	37.79	34.81
Crop insurance	18.34	17.69	19.44	18.48
Drying expense	0.46	-	1.44	-
Fuel & oil	16.02	13.06	18.13	14.12
Repairs	19.70	18.36	15.94	20.42
Custom hire	6.28	8.19	7.67	4.20
Land rent	54.38	66.33	50.53	50.59
Machinery leases	0.84	-	-	-
Operating interest	2.93	3.85	2.54	1.40
Miscellaneous	0.44	1.52	0.07	0.51
Total direct expenses per acre	263.23	260.79	268.93	258.29
Return over direct exp per acre	112.56	-5.54	94.83	203.00
<b>Overhead Expenses</b>				
Hired labor	10.26	4.19	11.93	12.93
Machinery leases	2.39	0.17	1.58	4.86
Building leases	0.11	1.11	-	-
Farm insurance	3.78	3.88	2.80	3.76
Utilities	3.66	3.54	2.95	5.92
Dues & professional fees	0.86	0.95	0.86	0.79
Interest	2.35	2.78	1.21	1.59
Mach & bldg depreciation	29.19	22.95	29.54	30.48
Miscellaneous	6.09	5.44	7.87	4.98
Total overhead expenses per acre	58.69	45.02	58.72	65.31
Total dir & ovhd expenses per acre	321.93	305.81	327.65	323.60
Net return per acre	53.86	-50.56	36.11	137.69
Government payments	12.78	6.92	12.53	17.01
Net return with govt pmts	66.64	-43.64	48.64	154.71
Labor & management charge	24.06	20.84	22.62	29.29
Net return over lbr & mgt	42.59	-64.48	26.02	125.42
<b>Cost of Production</b>				
Total direct expense per bu.	4.65	6.16	4.91	3.93
Total dir & ovhd exp per bu.	5.68	7.23	5.99	4.93
Less govt & other income	5.41	7.02	5.66	4.65
With labor & management	5.83	7.51	6.08	5.09
Net value per unit	6.59	5.99	6.55	7.02
Machinery cost per acre	74.59	63.91	72.08	73.30
Est. labor hours per acre	1.06	1.20	1.12	0.93

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
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**(Farms Sorted By Net Return)**

**Wheat, Spring on Share Rent**

	<b>Avg. Of All Farms</b>
Number of fields	12
Number of farms	11
Acres	116.17
Yield per acre (bu.)	58.76
Operators share of yield %	66.65
Value per bu.	6.58
Total product return per acre	257.61
Crop insurance per acre	0.62
Gross return per acre	258.23
<b>Direct Expenses</b>	
Seed	22.41
Fertilizer	70.97
Crop chemicals	21.42
Crop insurance	13.36
Fuel & oil	17.89
Repairs	26.09
Custom hire	4.82
Operating interest	2.17
Total direct expenses per acre	179.13
Return over direct exp per acre	79.10
<b>Overhead Expenses</b>	
Hired labor	10.52
Machinery leases	0.61
Building leases	0.59
Farm insurance	5.31
Utilities	2.68
Dues & professional fees	1.88
Interest	1.77
Mach & bldg depreciation	30.80
Miscellaneous	8.45
Total overhead expenses per acre	62.62
Total dir & ovhd expenses per acre	241.74
Net return per acre	16.49
Government payments	9.03
Net return with govt pmts	25.52
Labor & management charge	26.08
Net return over lbr & mgt	-0.57
<b>Cost of Production</b>	
Total direct expense per bu.	4.57
Total dir & ovhd exp per bu.	6.17
Less govt & other income	5.93
With labor & management	6.59
Net value per unit	6.58
Machinery cost per acre	80.71
Est. labor hours per acre	1.15

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
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**(Farms Sorted By Net Return)**

**Wheat, Winter on Owned Land**

	<b>Avg. Of All Farms</b>
Number of fields	5
Number of farms	5
Acres	117.88
Yield per acre (bu.)	49.74
Operators share of yield %	100.00
Value per bu.	6.26
Total product return per acre	311.35
Crop insurance per acre	24.89
Gross return per acre	336.23
<b>Direct Expenses</b>	
Seed	32.12
Fertilizer	89.50
Crop chemicals	47.99
Crop insurance	24.76
Fuel & oil	14.10
Repairs	18.63
Custom hire	14.78
Operating interest	4.21
Total direct expenses per acre	246.09
Return over direct exp per acre	90.14
<b>Overhead Expenses</b>	
Hired labor	9.39
Machinery leases	2.77
RE & pers. property taxes	5.69
Farm insurance	3.37
Utilities	3.20
Interest	23.67
Mach & bldg depreciation	20.93
Miscellaneous	7.84
Total overhead expenses per acre	76.85
Total dir & ovhd expenses per acre	322.94
Net return per acre	13.29
Government payments	17.13
Net return with govt pmts	30.42
Labor & management charge	22.25
Net return over lbr & mgt	8.17
<b>Cost of Production</b>	
Total direct expense per bu.	4.95
Total dir & ovhd exp per bu.	6.49
Less govt & other income	5.65
With labor & management	6.10
Net value per unit	6.26
Machinery cost per acre	71.82
Est. labor hours per acre	1.58



**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
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**(Farms Sorted By Net Return)**

**Wheat, Winter on Cash Rent**

	<u>Avg. Of All Farms</u>
Number of fields	6
Number of farms	6
Acres	131.82
Yield per acre (bu.)	36.07
Operators share of yield %	100.00
Value per bu.	6.18
Total product return per acre	222.94
Crop insurance per acre	29.18
Gross return per acre	252.12
<b>Direct Expenses</b>	
Seed	31.02
Fertilizer	89.58
Crop chemicals	42.00
Crop insurance	22.77
Fuel & oil	14.03
Repairs	17.24
Custom hire	18.81
Land rent	53.75
Operating interest	7.57
Total direct expenses per acre	296.79
Return over direct exp per acre	-44.66
<b>Overhead Expenses</b>	
Custom hire	0.18
Hired labor	6.22
Machinery leases	3.63
Building leases	1.28
Farm insurance	2.94
Utilities	3.01
Interest	1.91
Mach & bldg depreciation	18.24
Miscellaneous	7.03
Total overhead expenses per acre	44.46
Total dir & ovhd expenses per acre	341.25
Net return per acre	-89.12
Government payments	7.70
Net return with govt pmts	-81.42
Labor & management charge	19.97
Net return over lbr & mgt	-101.39
<b>Cost of Production</b>	
Total direct expense per bu.	8.23
Total dir & ovhd exp per bu.	9.46
Less govt & other income	8.44
With labor & management	8.99
Net value per unit	6.18
Machinery cost per acre	72.18
Est. labor hours per acre	1.15

## 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.

**Livestock Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(Farms Sorted By Net Return Per Unit)**

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

	<b>Avg. Of All Farms</b>	
Number of farms	23	
	Quantity	Value
Beef Calves sold (lb)	38.05	65.75
Transferred out (lb)	61.95	109.34
Cull sales		23.70
Other income		0.22
Purchased		-29.00
Transferred in		-21.27
Inventory change		9.82
Gross margin		158.54
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	17.92	4.79
Creep / Starter (lb.)	16.72	2.44
Complete Ration (lb.)	64.04	3.35
Corn (bu.)	0.15	0.74
Corn Silage (lb.)	214.94	3.66
Hay, Alfalfa (lb.)	109.20	3.29
Hay, Grass (lb.)	1,155.44	29.43
Pasture (aum)	1.28	21.34
Other feed stuffs (lb)	103.09	3.98
Veterinary		4.76
Supplies		3.08
Fuel & oil		4.82
Repairs		4.63
Custom hire		2.29
Bedding		0.88
Operating interest		1.55
Total direct expenses		95.05
Return over direct expense		63.49
<b>Overhead Expenses</b>		
Hired labor		3.83
Farm insurance		2.05
Utilities		1.28
Interest		2.40
Mach & bldg depreciation		6.43
Miscellaneous		3.59
Total overhead expenses		19.57
Total dir & ovhd expenses		114.62
Net return		43.92
Labor & management charge		13.02
Net return over lbr & mgt		30.90
<b>Cost of Production Per Cwt. Produced</b>		
Total direct expense per unit		95.05
Total dir & ovhd expense per unit		114.62
With other revenue adjustments		131.39
With labor and management		144.40
Est. labor hours per unit		0.99
<b>Other Information</b>		
Number of cows		173.7
Pregnancy percentage		98.4
Pregnancy loss percentage		0.6
Culling percentage		15.0
Calving percentage		97.8
Weaning percentage		90.9
Calves sold per cow		0.93
Calf death loss percent		7.5
Cow death loss percent		1.5
Average weaning weight		554
Lb. weaned/exposed female		503
Feed cost per cow		381.51
Avg wgt/ Beef Calves sold		574
Avg price / cwt.		172.78

**Livestock Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(Farms Sorted By Net Return Per Unit)**

**Beef Cow-Calf -- Average Per Cow**

	<b>Avg. Of All Farms</b>	
Number of farms		23
	Quantity	Value
Beef Calves sold (lb)	198.8	343.51
Transferred out (lb)	323.6	571.22
Cull sales		123.80
Other income		1.15
Purchased		-151.54
Transferred in		-111.15
Inventory change		51.29
Gross margin		828.29
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	93.6	25.02
Creep / Starter (lb.)	87.4	12.75
Complete Ration (lb.)	334.6	17.52
Corn (bu.)	0.8	3.86
Corn Silage (lb.)	1,123.0	19.11
Hay, Alfalfa (lb.)	570.5	17.19
Hay, Grass (lb.)	6,036.6	153.77
Pasture (aum)	6.7	111.51
Other feed stuffs (lb)	538.6	20.77
Veterinary		24.89
Supplies		16.10
Fuel & oil		25.21
Repairs		24.21
Custom hire		11.95
Bedding		4.61
Operating interest		8.12
Total direct expenses		496.59
Return over direct expense		331.70
<b>Overhead Expenses</b>		
Hired labor		19.98
Farm insurance		10.70
Utilities		6.66
Interest		12.52
Mach & bldg depreciation		33.61
Miscellaneous		18.75
Total overhead expenses		102.23
Total dir & ovhd expenses		598.82
Net return		229.46
Labor & management charge		68.01
Net return over lbr & mgt		161.45
<b>Cost of Production Per Cwt. Produced</b>		
Total direct expense per unit		95.05
Total dir & ovhd expense per unit		114.62
With other revenue adjustments		131.39
With labor and management		144.40
Est. labor hours per unit		5.17
<b>Other Information</b>		
Number of cows		173.7
Pregnancy percentage		98.4
Pregnancy loss percentage		0.6
Culling percentage		15.0
Calving percentage		97.8
Weaning percentage		90.9
Calves sold per cow		0.93
Calf death loss percent		7.5
Cow death loss percent		1.5
Average weaning weight		554
Lb. weaned/exposed female		503
Feed cost per cow		381.51
Avg wgt/ Beef Calves sold		574
Avg price / cwt.		172.78

**Livestock Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(Farms Sorted By Net Return Per Unit)**

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

	<u>Avg. Of</u>	
	<u>All Farms</u>	
Number of farms	12	
	Quantity	Value
Beef Calves sold (lb)	26.21	43.75
Transferred out (lb)	62.64	107.09
Cull sales		24.68
Other income		1.15
Purchased		-13.32
Transferred in		-36.30
Inventory change		39.58
Gross margin		166.62
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	29.27	6.88
Barley (bu.)	0.24	0.85
Corn (bu.)	0.45	2.08
Corn Silage (lb.)	734.09	10.82
Hay, Alfalfa (lb.)	106.48	2.86
Hay, Grass (lb.)	884.13	26.72
Pasture (aum)	1.01	22.20
Other feed stuffs (lb)	58.20	2.96
Veterinary		4.24
Supplies		1.85
Fuel & oil		6.19
Repairs		7.20
Custom hire		2.42
Livestock leases		1.98
Marketing		1.82
Total direct expenses		101.08
Return over direct expense		65.54
<b>Overhead Expenses</b>		
Machinery leases		1.79
Farm insurance		1.88
Utilities		2.15
Interest		2.20
Mach & bldg depreciation		6.05
Miscellaneous		4.29
Total overhead expenses		18.35
Total dir & ovhd expenses		119.43
Net return		47.19
Labor & management charge		14.18
Net return over lbr & mgt		33.01
<b>Cost of Production Per Cwt. Produced</b>		
Total direct expense per unit		101.08
Total dir & ovhd expense per unit		119.43
With other revenue adjustments		127.45
With labor and management		141.62
Est. labor hours per unit		0.94
<b>Other Information</b>		
Number of cows		91.7
Pregnancy percentage		97.8
Pregnancy loss percentage		0.5
Culling percentage		14.3
Calving percentage		97.4
Weaning percentage		90.4
Calves sold per cow		0.78
Calf death loss percent		5.4
Cow death loss percent		1.3
Average weaning weight		541
Lb. weaned/exposed female		489
Feed cost per cow		424.66
Avg wgt/ Beef Calves sold		615
Avg price / cwt.		166.93

**Livestock Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(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	12	
	Quantity	Value
Beef Calves sold (lb)	147.7	246.50
Transferred out (lb)	353.0	603.39
Cull sales		139.04
Other income		6.50
Purchased		-75.03
Transferred in		-204.55
Inventory change		223.01
Gross margin		938.87
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	164.9	38.77
Barley (bu.)	1.4	4.77
Corn (bu.)	2.5	11.71
Corn Silage (lb.)	4,136.4	60.96
Hay, Alfalfa (lb.)	600.0	16.14
Hay, Grass (lb.)	4,981.8	150.55
Protein Supplement (lb.)	16.4	2.25
Pasture (aum)	5.7	125.07
Other feed stuffs (lb)	311.6	14.46
Veterinary		23.91
Supplies		10.41
Fuel & oil		34.90
Repairs		40.60
Custom hire		13.65
Livestock leases		11.17
Marketing		10.26
Total direct expenses		569.56
Return over direct expense		369.30
<b>Overhead Expenses</b>		
Machinery leases		10.11
Farm insurance		10.58
Utilities		12.09
Interest		12.38
Mach & bldg depreciation		34.08
Miscellaneous		24.17
Total overhead expenses		103.40
Total dir & ovhd expenses		672.96
Net return		265.90
Labor & management charge		79.88
Net return over lbr & mgt		186.03
<b>Cost of Production Per Cwt. Produced</b>		
Total direct expense per unit		101.08
Total dir & ovhd expense per unit		119.43
With other revenue adjustments		127.45
With labor and management		141.62
Est. labor hours per unit		5.28
<b>Other Information</b>		
Number of cows		91.7
Pregnancy percentage		97.8
Pregnancy loss percentage		0.5
Culling percentage		14.3
Calving percentage		97.4
Weaning percentage		90.4
Calves sold per cow		0.78
Calf death loss percent		5.4
Cow death loss percent		1.3
Average weaning weight		541
Lb. weaned/exposed female		489
Feed cost per cow		424.66
Avg wgt/ Beef Calves sold		615
Avg price / cwt.		166.93

**Livestock Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(Farms Sorted By Net Return Per Unit)**

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

	<u>Avg. Of All Farms</u>	
Number of farms	18	
	Quantity	Value
Beef Replace sold (hd)	0.3	513.41
Transferred out (hd)	0.7	1,026.66
Cull sales (hd)	0.1	67.09
Other income		-
Purchased (hd)	0.4	-414.59
Transferred in (hd)	0.6	-545.55
Inventory change (hd)	-0.1	-43.90
Gross margin		603.12
<b>Direct Expenses</b>		
Beet Pulp (dry) (lb.)	248.7	12.04
Protein Vit Minerals (lb.)	67.7	16.53
Complete Ration (lb.)	214.5	14.45
Corn (bu.)	5.2	28.08
Corn Silage (lb.)	1,316.4	23.89
Hay, Alfalfa (lb.)	213.1	6.79
Hay, Grass (lb.)	2,174.0	70.65
Oats (bu.)	1.8	4.84
Pasture (aum)	4.8	86.92
Screenings, Heavy (lb.)	30.1	2.36
DDGS, dry (lb.)	139.1	17.94
Other feed stuffs (lb)	89.0	1.61
Breeding fees		9.31
Veterinary		13.29
Supplies		5.93
Fuel & oil		9.64
Repairs		5.58
Custom hire		13.24
Utilities		0.73
Marketing		2.69
Bedding		4.11
Total direct expenses		350.62
Return over direct expense		252.50
<b>Overhead Expenses</b>		
Hired labor		12.53
Farm insurance		5.54
Mach & bldg depreciation		16.40
Miscellaneous		17.91
Total overhead expenses		52.39
Total dir & ovhd expenses		403.01
Net return		200.11
Labor & management charge		31.19
Net return over lbr & mgt		168.92
Est. labor hours per unit		1.75
<b>Other Information</b>		
No. purchased or trans in		52
Number sold or trans out		52
Average number of head		46
Percentage death loss		0.6
Feed cost/head sold/trans		286.09

**Livestock Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(Farms Sorted By Net Return Per Unit)**

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

	<b>Avg. Of All Farms</b>	
Number of farms	7	
	Quantity	Value
Backgnd Beef sold (lb)	360.43	610.20
Transferred out (lb)	132.03	229.08
Other income		-1.95
Transferred in (lb)	-349.99	-623.15
Inventory change (lb)	-42.47	-63.70
Gross margin		150.48
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	10.20	3.22
Creep / Starter (lb.)	9.85	2.33
Complete Ration (lb.)	84.15	6.88
Corn (bu.)	3.64	14.79
Corn Silage (lb.)	598.72	9.81
Hay, Alfalfa (lb.)	90.69	2.69
Hay, Grass (lb.)	325.80	6.95
Screenings, Heavy (lb.)	247.88	12.50
DDGS, dry (lb.)	52.60	3.93
Other feed stuffs (lb)	10.87	0.96
Veterinary		3.41
Supplies		0.98
Fuel & oil		4.59
Repairs		3.59
Custom hire		0.27
Utilities		0.39
Marketing		7.65
Bedding		2.29
Operating interest		1.51
Total direct expenses		88.72
Return over direct expense		61.76
<b>Overhead Expenses</b>		
Hired labor		3.55
Interest		1.71
Mach & bldg depreciation		3.40
Miscellaneous		5.03
Total overhead expenses		13.69
Total dir & ovhd expenses		102.40
Net return		48.07
Labor & management charge		7.59
Net return over lbr & mgt		40.48
<b>Cost of Production Per Cwt. Produced</b>		
Total direct expense per unit		157.49
Total dir & ovhd expense per unit		160.27
With other revenue adjustments		160.67
With labor and management		162.21
Est. labor hours per unit		0.62
<b>Other Information</b>		
No. purchased or trans in		188
Number sold or trans out		207
Percentage death loss		0.3
Avg. daily gain (lb.)		1.81
Lb. of conc / lb. of gain		6.20
Lb. of feed / lb. of gain		12.47
Feed cost per cwt. of gain		64.05
Feed cost per head		90.86
Avg wgt / Backgnd Beef sold		730
Avg sales price / cwt.		169.30



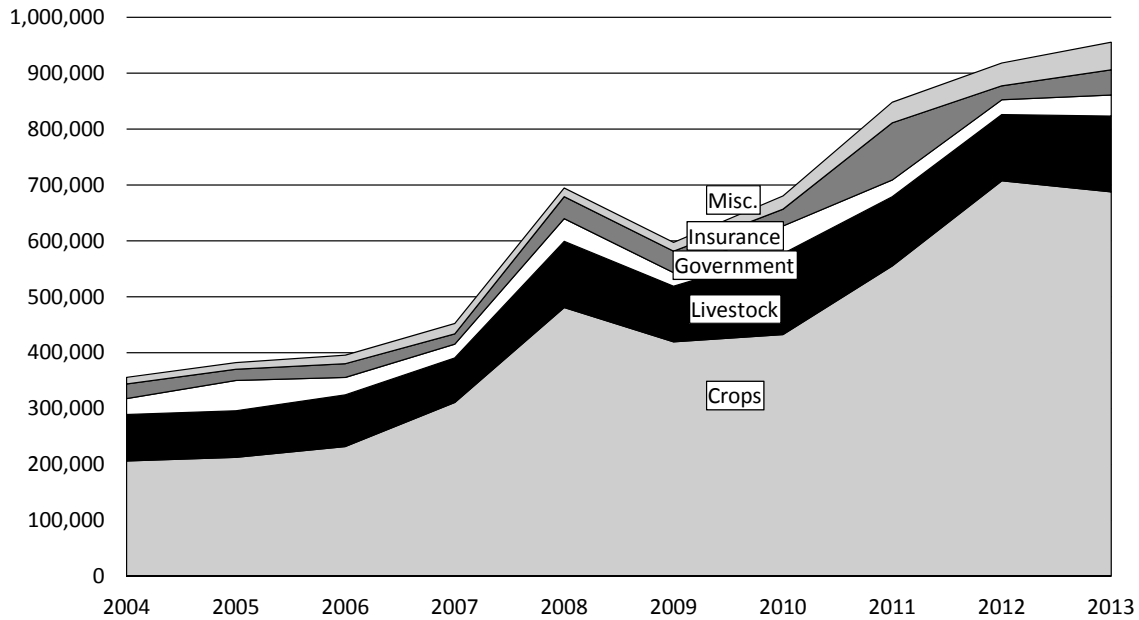
**Livestock Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2013**  
**(Farms Sorted By Net Return Per Unit)**

**Beef Backgrounding -- Average Per Head**

	<u>Avg. Of All Farms</u>	
Number of farms	7	
	Quantity	Value
Backgnd Beef sold (lb)	511.3	865.56
Transferred out (lb)	187.3	324.95
Other income		-2.77
Transferred in (lb)	-496.5	-883.93
Inventory change (lb)	-60.2	-90.36
Gross margin		213.45
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	14.5	4.56
Creep / Starter (lb.)	14.0	3.31
Complete Ration (lb.)	119.4	9.77
Corn (bu.)	5.2	20.98
Corn Silage (lb.)	849.3	13.91
Hay, Alfalfa (lb.)	128.6	3.82
Hay, Grass (lb.)	462.1	9.85
Screenings, Heavy (lb.)	351.6	17.73
DDGS, dry (lb.)	74.6	5.57
Other feed stuffs (lb)	15.4	1.36
Veterinary		4.83
Supplies		1.76
Fuel & oil		6.51
Repairs		5.10
Utilities		0.55
Marketing		10.85
Bedding		3.24
Operating interest		2.14
Total direct expenses		125.84
Return over direct expense		87.61
<b>Overhead Expenses</b>		
Hired labor		5.03
Farm insurance		1.85
Interest		2.43
Mach & bldg depreciation		4.82
Miscellaneous		5.28
Total overhead expenses		19.41
Total dir & ovhd expenses		145.26
Net return		68.19
Labor & management charge		10.77
Net return over lbr & mgt		57.42
<b>Cost of Production Per Cwt. Produced</b>		
Total direct expense per unit		157.49
Total dir & ovhd expense per unit		160.27
With other revenue adjustments		160.67
With labor and management		162.21
Est. labor hours per unit		0.88
<b>Other Information</b>		
No. purchased or trans in		188
Number sold or trans out		207
Percentage death loss		0.3
Avg. daily gain (lb.)		1.81
Lb. of conc / lb. of gain		6.20
Lb. of feed / lb. of gain		12.47
Feed cost per cwt. of gain		64.05
Feed cost per head		90.86
Avg wgt / Backgnd Beef sold		730
Avg sales price / cwt.		169.30

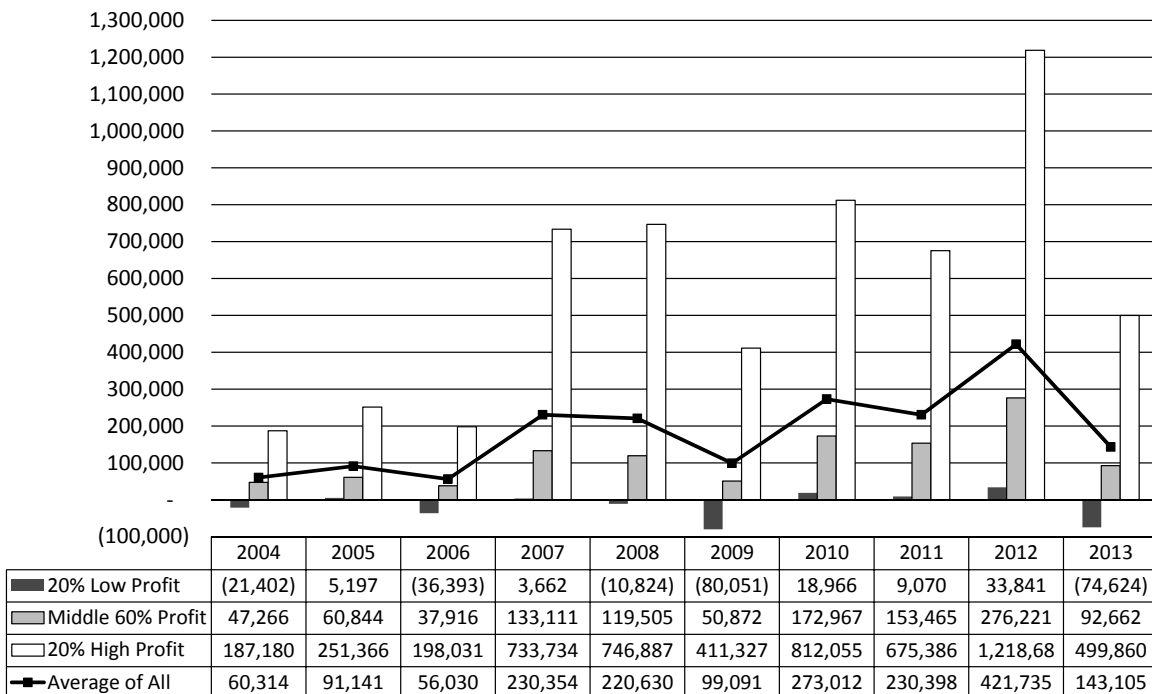
# Figure 1. Gross Cash Income Per Farm

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



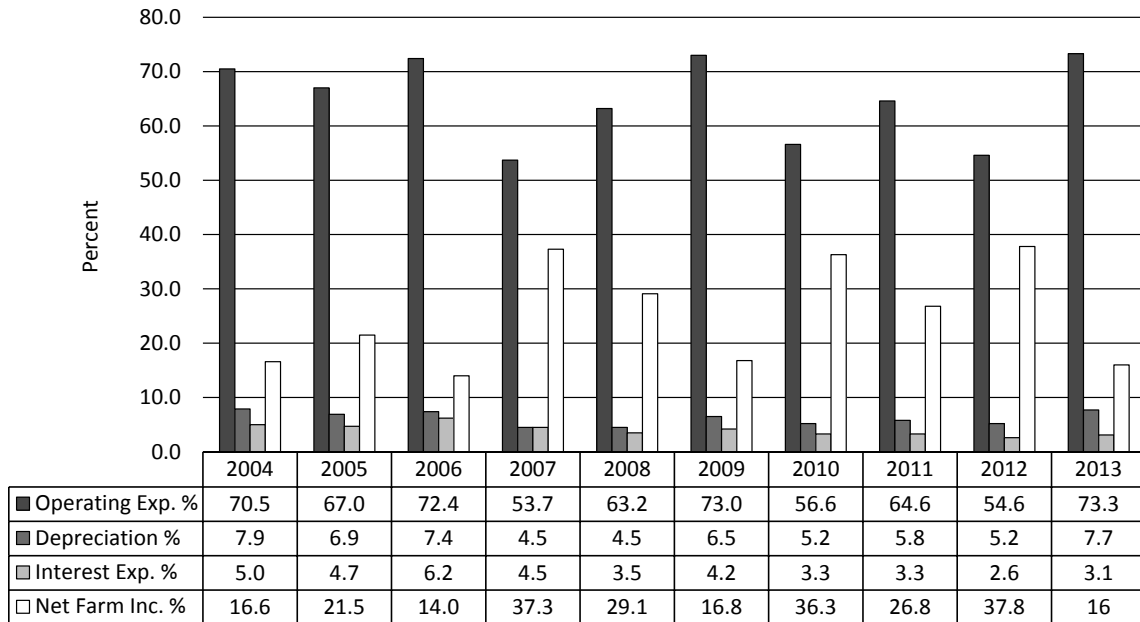
# Figure 2. Net Farm Income (Accrual) Per Farm

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



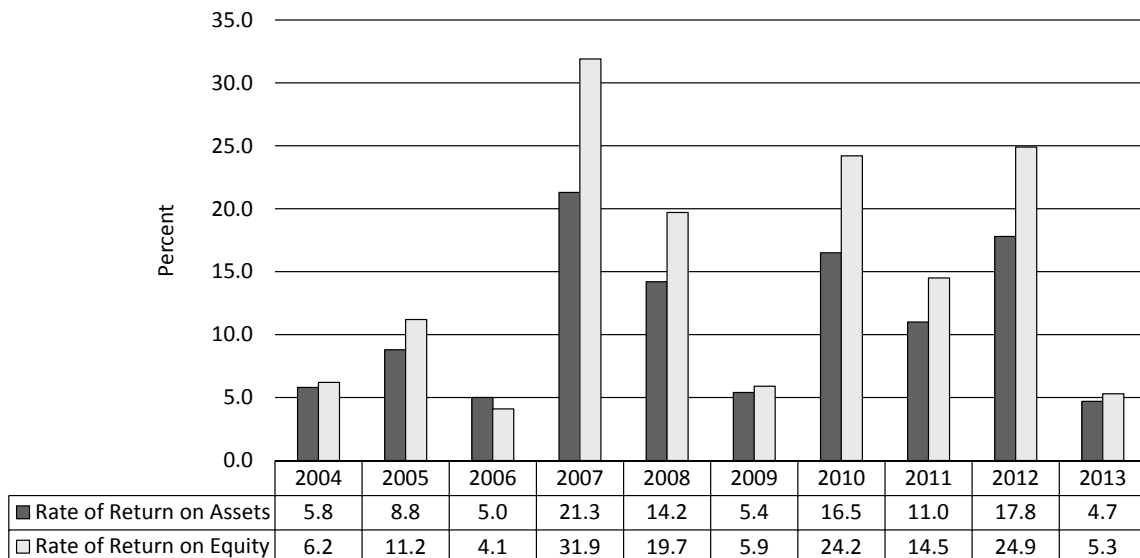
## Figure 3. Financial Efficiency Measures (As Percent of Gross Revenue)

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



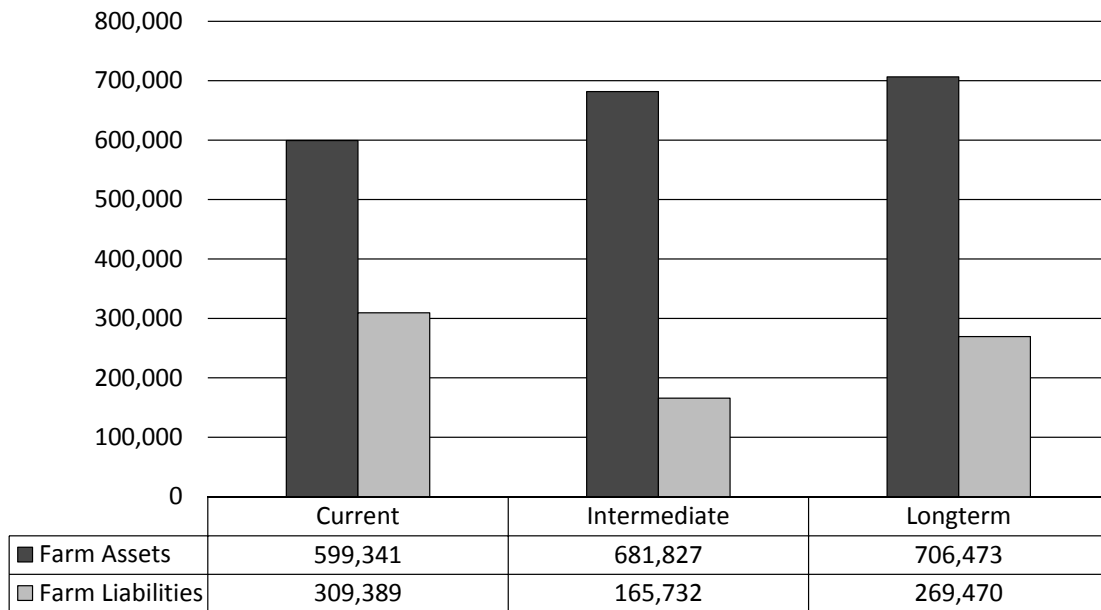
## Figure 4. Profitability Measures Per Farm

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



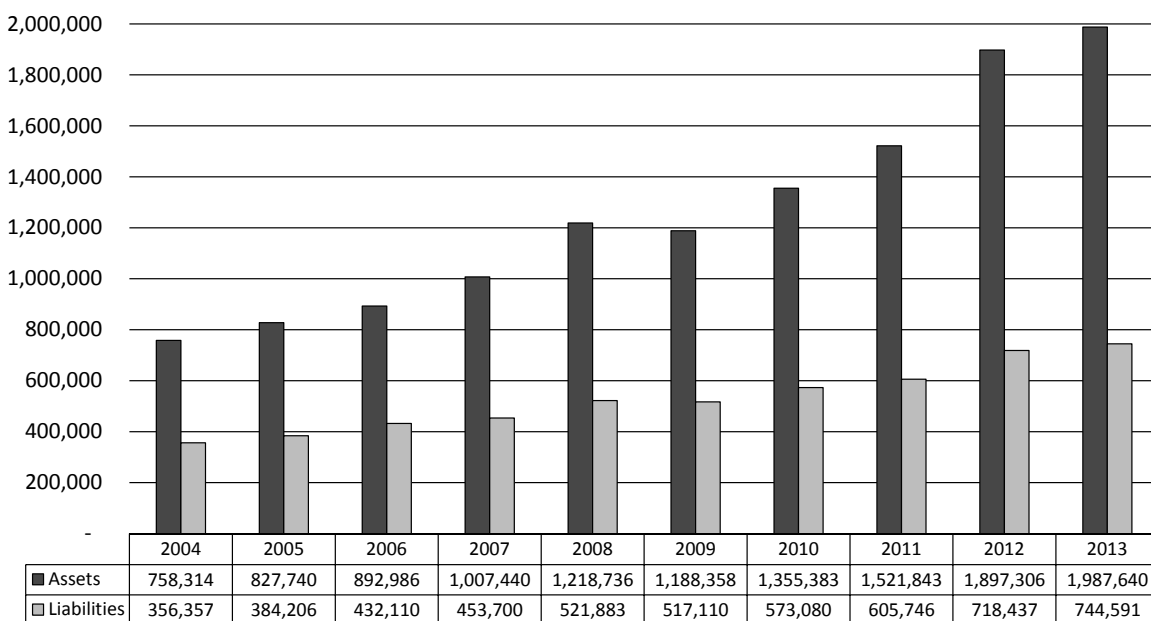
## Figure 5. Assets and Liabilities Per Farm, 2013

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



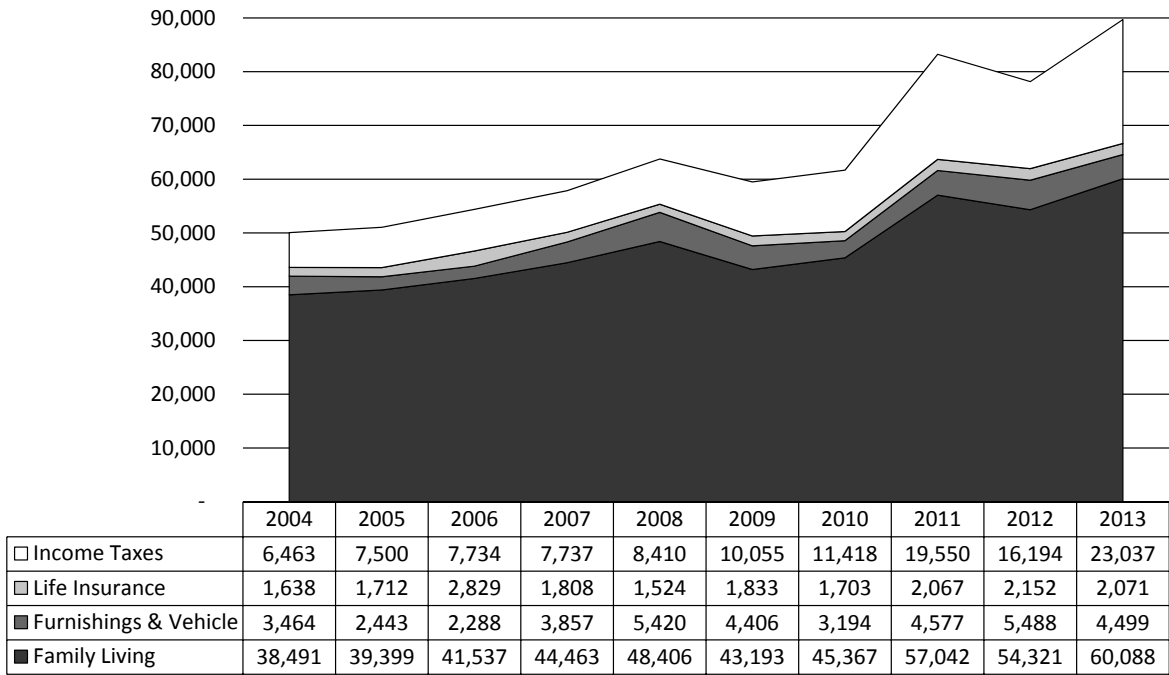
## Figure 6. Total Farm Assets and Liabilities

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



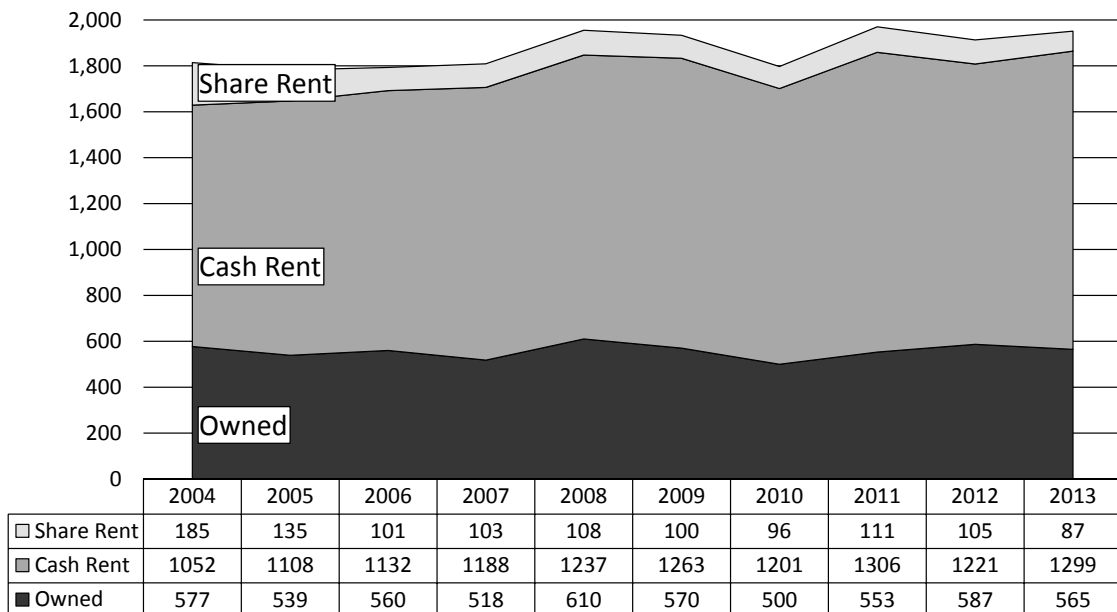
## Figure 7. Household and Personal Expenses

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



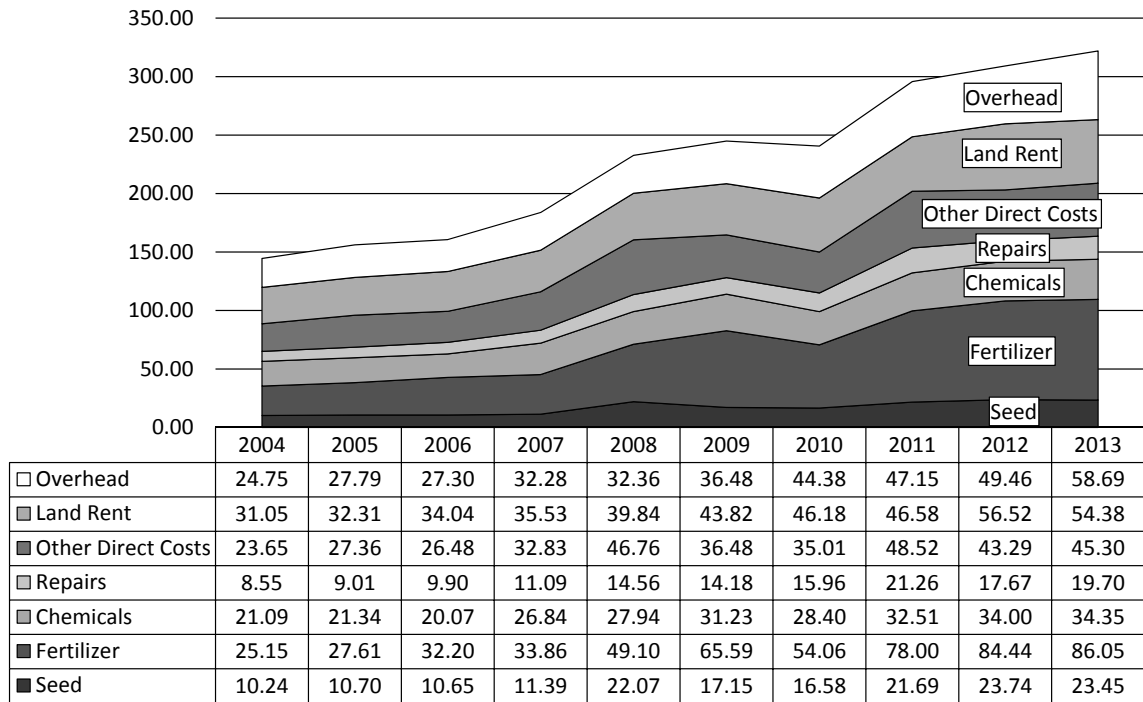
## Figure 8. Crop Acreage Per Farm

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



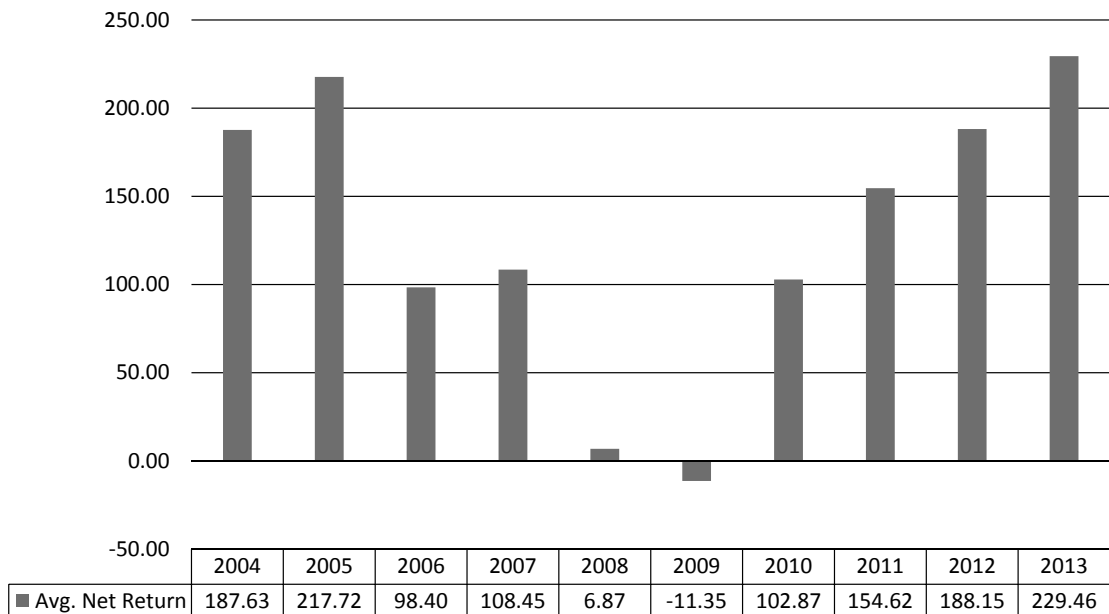
## Figure 9. Spring Wheat Costs Per Acre

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



## Figure 10. Average Net Return Per Beef Cow

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





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