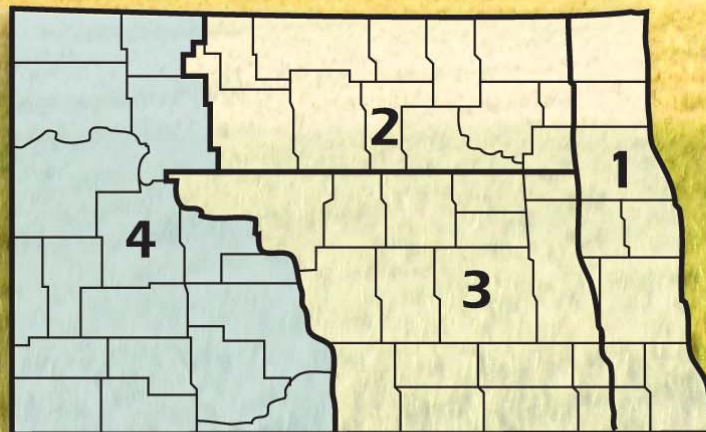


# 2011 ANNUAL REPORT

## Region 4

North Dakota Farm and Ranch  
Business Management Education

### Regional Reporting Areas



[www.ndfarmmanagement.com](http://www.ndfarmmanagement.com)



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# NORTH DAKOTA FARM BUSINESS MANAGEMENT EDUCATION

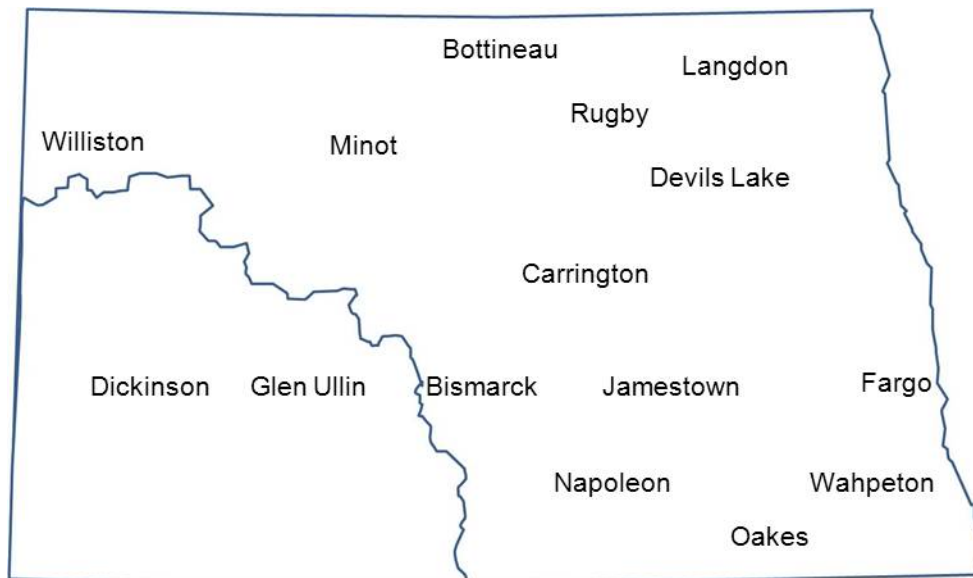
## REGION 4 – WESTERN MISSOURI SLOPE 2011 ANNUAL REPORT

The South Central (Region 4) farm business analyses were submitted by the following instructors represented by their cooperating schools.

<u>School</u>	<u>Instructor</u>
Bismarck State College .....	Mark Holkup
Bismarck State College - Dickinson.....	Jerry Tuhy
Glen Ullin High School.....	Donald Hagen
Williston State College.....	Beau Anderson

This report was made possible by the farm families who cooperated with their farm management instructors in getting the records for 2011 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



## 2011 Western Missouri Slope 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 2011 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 23rd 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**  
**Region 4 - Western Missouri Slope, 2011**  
**(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	88	17	17	18
<b>Cash Farm Income</b>				
Barley	10,305	1,008	1,778	40,283
Beans, Garbonzo	5,115	-	-	15,266
Beans, Pinto	8,622	-	-	42,150
Canola	15,662	7,905	4,471	45,799
Corn	29,313	9,629	10,238	97,238
Flax	1,851	6,303	-	-
Hay, Alfalfa	1,077	-	-	4,259
Hay, Mixed	499	247	-	1,533
Hay, Mixed Alfalfa/Grass	2,554	880	1,356	9,214
Lentils	8,641	-	-	37,420
Oats	1,031	549	1,112	726
Peas, Field	10,436	9,636	1,389	38,155
Radishes	1,566	-	-	7,655
Safflower	1,843	-	856	5,770
Sunflowers	70,516	14,450	14,176	210,660
Wheat, Durum	35,804	3,953	15,086	103,758
Wheat, Spring	109,213	29,490	54,910	307,188
Wheat, Winter	9,565	11,295	4,414	28,914
Miscellaneous crop income	78	11	-	-
Beef Bulls	5,020	-	4,148	-
Beef Cow-Calf, Beef Calves	38,012	26,861	47,359	52,329
Beef Replacement Heifers	7,191	-	1,114	22,457
Beef Backgrounding	68,206	16,047	49,375	152,153
Beef Finishing	29,046	200	-	141,815
Beef Yearlings	63	-	-	228
Beef Grazing	157	-	-	-
Broilers	37	192	-	-
Dairy, Milk	9,708	1,450	-	-
Dairy, Dairy Calves	354	7	-	-
Hogs, Farrow To Finish, Raised Ho	1,403	7,263	-	-
Hogs, Finish Feeder Pigs	38	199	-	-
Sheep, Feeder Lamb Prod, Wool	19	100	-	-
Sheep, Market Lamb Prod, Mkt Lamb	214	997	110	-
Dairy Backgrounding	137	-	-	-
Cull breeding livestock	23,892	12,833	33,442	25,204
Misc. livestock income	7,749	405	1,508	23,100
Direct, CCP & ACRE pymts	11,375	4,633	5,698	27,799
CRP payments	542	369	793	143
Other government payments	9,141	176	1,261	27,941
Custom work income	7,125	7,260	4,071	16,393
Patronage dividends, cash	4,355	1,031	3,255	11,967
Insurance income	68,432	37,305	41,672	182,855
Other farm income	10,250	6,209	9,450	17,854
<b>Gross Cash Farm Income</b>	<b>626,157</b>	<b>218,894</b>	<b>313,044</b>	<b>1,698,226</b>

**Farm Income Statement (Continued)**  
**North Dakota Farm Business Management Education**  
**Region 4 - Western Missouri Slope, 2011**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of</u> <u>All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	88	17	17	18
<b>Cash Farm Expense</b>				
Seed	22,892	15,158	11,305	61,302
Fertilizer	59,386	23,411	24,292	154,911
Crop chemicals	42,091	12,061	16,603	126,724
Crop insurance	27,094	11,895	12,166	74,755
Drying expense	59	29	-	259
Irrigation energy	399	-	97	1,771
Crop marketing	107	59	32	313
Crop miscellaneous	3,266	24	378	2,822
Feeder livestock purchase	20,286	4,407	18,818	53,666
Purchased feed	23,067	12,236	13,100	50,173
Breeding fees	334	-	632	-
Veterinary	5,173	1,413	3,105	9,206
Supplies	1,947	1,581	911	1,990
Livestock leases	780	-	1,204	-
Livestock marketing	2,451	996	1,958	2,053
Interest	31,644	20,392	15,836	70,487
CCC buyback	1,968	10,185	-	-
Fuel & oil	33,043	21,077	18,107	70,626
Repairs	38,452	23,083	23,757	89,645
Custom hire	22,723	6,815	12,567	57,185
Hired labor	12,720	4,777	2,309	42,240
Land rent	58,374	30,432	38,980	141,273
Machinery leases	2,624	532	316	9,148
Building leases	146	271	10	414
Real estate taxes	2,384	914	1,603	4,374
Farm insurance	5,808	2,042	4,138	13,680
Utilities	5,835	2,641	3,673	11,856
Dues & professional fees	1,013	857	838	1,620
Purchase of resale items	75	-	-	366
Miscellaneous	7,972	4,749	6,178	16,138
Total cash expense	434,109	212,038	232,914	1,068,997
Net cash farm income	192,048	6,857	80,130	629,229
<b>Inventory Changes</b>				
Prepays and supplies	459	-4,229	-1,124	4,458
Accounts receivable	7,074	16,223	-663	-3,071
Hedging accounts	-1,617	-	-210	-8,254
Other current assets	426	-4,682	220	8,675
Crops and feed	-9,102	-14,725	25,182	-41,365
Market livestock	-8,228	595	18,316	-96,959
Breeding livestock	-15,410	-8,202	-19,640	-27,286
Other assets	3,787	944	1,823	10,917
Accounts payable	6,260	926	-2,475	33,088
Accrued interest	117	-2,621	2,883	301
Total inventory change	-16,235	-15,771	24,311	-119,496
Net operating profit	175,814	-8,914	104,441	509,733
<b>Depreciation</b>				
Machinery and equipment	-26,380	-7,003	-10,002	-75,564
Titled vehicles	-3,458	-2,318	-371	-9,590
Buildings and improvements	-3,143	-923	-972	-10,089
Total depreciation	-32,981	-10,244	-11,346	-95,243
Net farm income from operations	142,833	-19,158	93,095	414,490
Gain or loss on capital sales	8,267	26	2	36,508
Net farm income	151,100	-19,132	93,097	450,998

**Inventory Changes**  
**North Dakota Farm Business Management Education**  
**Region 4 - Western Missouri Slope, 2011**  
**(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	88	17	17	18
Net cash farm income	192,048	6,857	80,130	629,229
<b>Crops and Feed</b>				
Ending inventory	282,001	42,018	140,438	725,198
Beginning inventory	291,102	56,743	115,257	766,562
Inventory change	-9,102	-14,725	25,182	-41,365
<b>Market Livestock</b>				
Ending inventory	86,442	24,618	70,434	128,406
Beginning inventory	94,671	24,023	52,118	225,365
Inventory change	-8,228	595	18,316	-96,959
<b>Accts Receivable</b>				
Ending inventory	19,663	17,134	18,866	28,981
Beginning inventory	12,590	911	19,529	32,052
Inventory change	7,074	16,223	-663	-3,071
<b>Prepaid Expenses and Supplies</b>				
Ending inventory	28,909	2,929	15,092	82,883
Beginning inventory	28,450	7,158	16,215	78,426
Inventory change	459	-4,229	-1,124	4,458
<b>Hedging Activities</b>				
Ending inventory	378	-	-	-
Withdrawals	1,705	-	-	8,333
Beginning inventory	1,170	-	-	4,587
Deposits	2,530	-	210	12,000
Gain or loss	-1,617	-	-210	-8,254
<b>Other Current Assets</b>				
Ending inventory	6,376	4,568	5,583	18,026
Beginning inventory	5,950	9,249	5,363	9,351
Inventory change	426	-4,682	220	8,675
<b>Breeding Livestock</b>				
Ending inventory	140,987	80,274	115,516	196,131
Capital sales	841	1,710	28	289
Beginning inventory	126,450	62,542	124,829	165,797
Capital purchases	30,788	27,644	10,355	57,909
Depreciation, capital adjust	-15,410	-8,202	-19,640	-27,286
<b>Other Capital Assets</b>				
Ending inventory	13,779	7,803	14,809	27,647
Capital sales	33	169	-	-
Beginning inventory	7,775	6,751	1,745	16,730
Capital purchases	2,249	276	11,241	-
Depreciation, capital adjust	3,787	944	1,823	10,917
<b>Accounts Payable</b>				
Beginning inventory	16,732	7,467	5,379	56,964
Ending inventory	10,472	6,540	7,854	23,876
Inventory change	6,260	926	-2,475	33,088
<b>Accrued Interest</b>				
Beginning inventory	13,194	7,759	10,165	24,939
Ending inventory	13,074	10,380	7,282	24,638
Inventory change	117	-2,621	2,883	301
Total inventory change	-16,235	-15,771	24,311	-119,496
Net operating profit	175,814	-8,914	104,441	509,733

**Depreciation**  
**North Dakota Farm Business Management Education**  
**Region 4 - Western Missouri Slope, 2011**  
**(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	88	17	17	18
Net operating profit	175,814	-8,914	104,441	509,733
<b>Machinery and Equipment</b>				
Ending inventory	335,155	120,954	161,573	906,931
Capital sales	6,542	347	103	16,501
Beginning inventory	280,590	92,389	124,800	767,532
Capital purchases	87,488	35,915	46,879	231,464
Depreciation, capital adjust.	-26,380	-7,003	-10,002	-75,564
<b>Titled Vehicles</b>				
Ending inventory	38,263	29,136	19,693	81,565
Capital sales	790	1,624	-	1,889
Beginning inventory	27,661	22,946	15,899	56,132
Capital purchases	14,850	10,131	4,166	36,912
Depreciation, capital adjust.	-3,458	-2,318	-371	-9,590
<b>Buildings and Improvements</b>				
Ending inventory	86,080	16,769	43,136	241,016
Capital sales	-	-	-	-
Beginning inventory	68,038	17,692	35,582	184,616
Capital purchases	21,186	-	8,527	66,490
Depreciation, capital adjust.	-3,143	-923	-972	-10,089
Total depreciation, capital adj.	-32,981	-10,244	-11,346	-95,243
Net farm income from operations	142,833	-19,158	93,095	414,490
Gain or loss on capital sales	8,267	26	2	36,508
Net farm income	151,100	-19,132	93,097	450,998

**Profitability Measures**  
**North Dakota Farm Business Management Education**  
**Region 4 - Western Missouri Slope, 2011**  
**(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	88	17	17	18
<b>Profitability (assets valued at cost)</b>				
Net farm income from operations	142,833	-19,158	93,095	414,490
Rate of return on assets	9.7 %	-4.0 %	10.1 %	12.8 %
Rate of return on equity	14.7 %	-41.6 %	15.4 %	20.0 %
Operating profit margin	22.7 %	-10.6 %	23.8 %	27.2 %
Asset turnover rate	42.7 %	37.8 %	42.4 %	47.1 %
Farm interest expense	31,527	23,013	12,953	70,186
Value of operator lbr and mgmt.	48,105	23,772	34,232	96,699
Return on farm assets	126,254	-19,917	71,816	387,977
Average farm assets	1,301,572	496,887	711,607	3,032,084
Return on farm equity	94,728	-42,930	58,864	317,791
Average farm equity	642,635	103,107	383,183	1,589,842
Value of farm production	556,141	187,865	301,791	1,427,134



**Liquidity & Repayment Capacity Measures**  
**North Dakota Farm Business Management Education**  
**Region 4 - Western Missouri Slope, 2011**  
**(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	88	17	17	18
<b>Liquidity</b>				
Current ratio	1.85	0.81	2.69	1.88
Working capital	199,473	-25,161	146,189	496,111
Working capital to gross inc	33.7 %	-12.3 %	46.4 %	31.7 %
Current assets	432,899	106,586	232,926	1,062,222
Current liabilities	233,426	131,747	86,737	566,110
Gross revenues (accrual)	591,372	204,507	315,114	1,566,538
<b>Repayment capacity</b>				
Net farm income from operations	142,833	-19,158	93,095	414,490
Depreciation	32,981	10,244	11,346	95,243
Personal income	57,118	67,189	93,724	53,347
Family living/owner withdrawals	-54,598	-49,960	-41,504	-90,980
Payments on personal debt	-4,850	-6,265	-2,608	-5,676
Income taxes paid	-6,010	-7,160	-3,725	-11,523
Interest on term debt	20,997	12,577	12,673	41,978
Capital debt repayment capacity	188,471	7,467	163,002	496,879
Scheduled term debt payments	-70,538	-40,436	-35,664	-166,381
Capital debt repayment margin	117,933	-32,970	127,338	330,498
Cash replacement allowance	-8,186	-1,014	-6,124	-21,254
Replacement margin	109,747	-33,984	121,214	309,244
Term debt coverage ratio	2.67	0.18	4.57	2.99
Replacement coverage ratio	2.39	0.18	3.90	2.65

**Balance Sheet at Cost Values**  
**North Dakota Farm Business Management Education**  
**Region 4 - Western Missouri Slope, 2011**  
**(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	84	17	16	17
<b>Assets</b>				
<b>Current Farm Assets</b>				
Cash and checking balance	24,454	7,560	17,309	63,364
Prepaid expenses & supplies	28,047	2,929	15,217	77,702
Growing crops	6,409	4,540	4,603	19,086
Accounts receivable	19,664	17,134	19,076	30,056
Hedging accounts	336	-	-	-
Crops held for sale or feed	271,145	49,777	103,228	736,054
Crops under government loan	-	-	-	-
Market livestock held for sale	82,836	24,618	73,479	135,959
Other current assets	8	28	15	-
Total current farm assets	432,899	106,586	232,926	1,062,222
<b>Intermediate Farm Assets</b>				
Breeding livestock	143,219	80,274	120,736	207,668
Machinery and equipment	318,655	120,954	129,441	905,574
Titled vehicles	37,511	29,136	19,939	86,363
Other intermediate assets	2,724	1,876	1,157	6,712
Total intermediate farm assets	502,109	232,240	271,272	1,206,316
<b>Long Term Farm Assets</b>				
Farm land	302,094	172,373	138,911	647,850
Buildings and improvements	86,158	16,769	35,111	252,076
Other long-term assets	10,921	5,927	14,578	22,561
Total long-term farm assets	399,173	195,069	188,601	922,487
Total Farm Assets	1,334,181	533,894	692,799	3,191,025
Total Nonfarm Assets	150,933	119,186	114,534	259,126
Total Assets	1,485,114	653,080	807,332	3,450,151
<b>Liabilities</b>				
<b>Current Farm Liabilities</b>				
Accrued interest	12,661	10,380	6,499	26,088
Accounts payable	10,591	6,540	8,345	23,407
Current notes	150,308	87,924	49,209	346,769
Government crop loans	-	-	-	-
Principal due on term debt	59,865	26,903	22,684	169,847
Total current farm liabilities	233,426	131,747	86,737	566,110
Total intermediate farm liabs	193,190	120,290	113,646	419,056
Total long term farm liabilities	226,823	178,918	87,264	452,340
Total farm liabilities	653,439	430,955	287,647	1,437,506
Total nonfarm liabilities	35,513	29,545	39,191	37,105
Total liabilities	688,952	460,499	326,837	1,474,611
Net worth (farm and nonfarm)	796,162	192,581	480,495	1,975,539
Net worth change	152,931	17,027	139,845	410,917
Percent net worth change	24 %	10 %	41 %	26 %
<b>Ratio Analysis</b>				
Current farm liabilities / assets	54 %	124 %	37 %	53 %
Intermediate farm liab. / assets	38 %	52 %	42 %	35 %
Long term farm liab. / assets	57 %	92 %	46 %	49 %
Total debt to asset ratio	46 %	71 %	40 %	43 %

**Statement Of Cash Flows**  
**North Dakota Farm Business Management Education**  
**Region 4 - Western Missouri Slope, 2011**  
**(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	88	17	17	18
Beginning cash (farm & nonfarm)	22,077	10,001	14,780	18,744
<b>Cash Provided By Operating Activities</b>				
Gross cash farm income	626,157	218,894	313,044	1,698,226
Total cash farm expense	-434,109	-212,038	-232,914	-1,068,997
Net cash from hedging transactions	-825	-	-210	-3,667
Cash provided by operating	191,223	6,857	79,920	625,562
<b>Cash Provided By Investing Activities</b>				
Sale of breeding livestock	1,404	2,601	29	289
Sale of machinery & equipment	6,887	179	103	16,502
Sale of titled vehicles	686	1,082	-	1,889
Sale of farm land	7,929	-	-	38,329
Sale of farm buildings	-	-	-	-
Sale of other farm assets	3	14	-	-
Sale of nonfarm assets	4,080	17,596	441	1,699
Purchase of breeding livestock	-30,788	-27,644	-10,355	-57,909
Purchase of machinery & equip.	-87,488	-35,915	-46,879	-231,464
Purchase of titled vehicles	-14,850	-10,131	-4,166	-36,912
Purchase of farm land	-38,535	-29,221	-3,118	-10,458
Purchase of farm buildings	-21,186	-	-8,527	-66,490
Purchase of other farm assets	-2,249	-276	-11,241	-
Purchase of nonfarm assets	-13,918	-4,737	-17,856	-14,518
Cash provided by investing	-188,025	-86,452	-101,568	-359,043
<b>Cash Provided By Financing Activities</b>				
Money borrowed	411,277	367,585	204,733	770,272
Principal payments	-388,084	-297,813	-224,721	-863,414
Personal income	57,118	67,189	93,724	53,347
Family living/owner withdrawals	-54,598	-49,960	-41,504	-90,980
Income and social security tax	-6,010	-7,160	-3,725	-11,523
Capital contributions	1,927	-	7,300	-
Capital distributions	-	-	-	-
Dividends paid	-	-	-	-
Cash gifts and inheritances	1,626	530	6,560	-
Gifts given	-323	-	-	-1,578
Other cash flows	-	-	-	-
Cash provided by financing	22,933	80,372	42,369	-143,876
Net change in cash balance	26,132	776	20,720	122,643
Ending cash (farm & nonfarm)	48,208	10,778	35,501	141,388

**Financial Standards Measures**  
**North Dakota Farm Business Management Education**  
**Region 4 - Western Missouri Slope, 2011**  
**(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	88	17	17	18
<b>Liquidity</b>				
Current ratio	1.85	0.81	2.69	1.88
Working capital	199,473	-25,161	146,189	496,111
Working capital to gross inc	33.7 %	-12.3 %	46.4 %	31.7 %
<b>Solvency (cost)</b>				
Farm debt to asset ratio	49 %	81 %	42 %	45 %
Farm equity to asset ratio	51 %	19 %	58 %	55 %
Farm debt to equity ratio	0.96	4.19	0.71	0.82
<b>Profitability (cost)</b>				
Rate of return on farm assets	9.7 %	-4.0 %	10.1 %	12.8 %
Rate of return on farm equity	14.7 %	-41.6 %	15.4 %	20.0 %
Operating profit margin	22.7 %	-10.6 %	23.8 %	27.2 %
Net farm income	151,100	-19,132	93,097	450,998
EBIDTA	207,340	14,099	117,394	579,920
<b>Repayment Capacity</b>				
Capital debt repayment capacity	188,471	7,467	163,002	496,879
Capital debt repayment margin	117,933	-32,970	127,338	330,498
Replacement margin	109,747	-33,984	121,214	309,244
Term debt coverage ratio	2.67	0.18	4.57	2.99
Replacement coverage ratio	2.39	0.18	3.90	2.65
<b>Efficiency</b>				
Asset turnover rate (cost)	42.7 %	37.8 %	42.4 %	47.1 %
Operating expense ratio	65.4 %	93.1 %	64.8 %	62.1 %
Depreciation expense ratio	5.5 %	5.0 %	3.4 %	6.2 %
Interest expense ratio	5.3 %	10.0 %	4.7 %	4.6 %
Net farm income ratio	25.2 %	-9.4 %	27.9 %	29.5 %

**Crop Production and Marketing Summary**  
**North Dakota Farm Business Management Education**  
**Region 4 - Western Missouri Slope, 2011**  
**(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	88	17	17	18
<b>Acreage Summary</b>				
Total acres owned	1,016	458	760	1,773
Total crop acres	1,917	841	1,050	4,623
Crop acres owned	516	212	235	1,304
Crop acres cash rented	1,284	576	761	3,013
Crop acres share rented	117	53	54	307
Total pasture acres	2,633	1,067	3,412	4,034
Percent crop acres owned	27 %	25 %	22 %	28 %
<b>Average Price Received (Cash Sales Only)</b>				
Wheat, Spring per bushel	8.77	8.72	9.12	8.77
Sunflowers per cwt	24.30	-	-	24.50
Corn per bushel	6.22	-	6.12	6.42
Wheat, Durum per bushel	8.41	-	-	8.53
Barley per bushel	3.97	-	-	3.88
Canola per cwt	23.33	-	-	22.69
Hay, Mixed Alfalfa/Grass per ton	53.43	-	-	-
Peas, Field per bushel	7.33	-	-	8.72
Wheat, Winter per bushel	7.22	-	-	7.67
Oats per bushel	3.04	-	-	-
Lentils per cwt	23.96	-	-	-
<b>Average Yield Per Acre</b>				
Pasture (aum)	0.451	0.650	0.419	0.436
Wheat, Spring (bushel)	24.56	20.35	24.82	25.38
Hay, Mixed Alfalfa/Grass (ton)	1.77	1.91	1.73	1.67
Sunflowers (cwt)	13.31	-	-	14.17
Corn (bushel)	84.62	-	77.70	86.44
Hay, Alfalfa (ton)	2.90	-	3.17	2.47
Wheat, Durum (bushel)	25.11	-	26.22	25.74
Hay, Small Grain (ton)	2.06	-	1.74	-
Corn Silage (ton)	13.70	-	-	-
Canola (cwt)	13.84	-	-	14.66
Flax (bushel)	14.30	-	-	10.64
Barley (bushel)	28.42	-	-	-
Hay, Grass (ton)	1.23	-	1.37	-
Peas, Field (bushel)	32.31	-	-	32.52
Wheat, Winter (bushel)	32.14	-	-	31.54
Oats (bushel)	42.63	-	-	-
Lentils (cwt)	13.62	-	-	14.77

**Household and Personal Expenses**  
**North Dakota Farm Business Management Education**  
**Region 4 - Western Missouri Slope, 2011**  
**(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	54	13	11	11
Average family size	3.1	2.6	2.7	3.6
<b>Family Living Expenses</b>				
Food and meals expense	8,871	6,866	6,549	14,169
Medical care	4,878	2,345	5,554	8,380
Health insurance	6,400	3,356	7,613	9,683
Cash donations	2,007	851	840	5,795
Household supplies	6,385	7,084	7,420	4,677
Clothing	1,738	945	1,256	3,091
Personal care	6,006	7,486	5,848	7,211
Child / Dependent care	538	864	5	161
Alimony and child support	67	-	-	-
Gifts	1,440	745	802	3,360
Education	1,666	456	2,370	2,673
Recreation	3,811	3,574	3,391	7,066
Utilities (household share)	2,993	3,541	2,617	3,806
Personal vehicle operating exp	2,965	5,439	2,118	1,300
Household real estate taxes	73	196	-	-
Dwelling rent	141	584	-	-
Household repairs	1,223	1,192	1,966	631
Personal interest	1,243	1,373	688	1,515
Disability / Long term care ins	76	63	-	237
Life insurance payments	1,740	387	2,328	3,613
Personal property insurance	223	115	274	549
Miscellaneous	1,470	1,871	28	2,910
Total cash family living expense	55,952	49,334	51,670	80,827
Family living from the farm	642	208	1,179	273
Total family living	56,594	49,542	52,849	81,100
<b>Other Nonfarm Expenditures</b>				
Income taxes	6,280	8,139	4,724	13,309
Furnishing & appliance purchases	39	-	-	191
Nonfarm vehicle purchases	3,154	1,433	2,779	6,118
Nonfarm real estate purchases	5,010	808	959	3,803
Other nonfarm capital purchases	4,171	423	9,683	2,927
Nonfarm savings & investments	14,124	-18,091	22,247	62,320
Total other nonfarm expenditures	32,777	-7,289	40,392	88,669
Total cash family living investment & nonfarm capital purch	88,729	42,045	92,062	169,496

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**Operator and Labor Information**  
**North Dakota Farm Business Management Education**  
**Region 4 - Western Missouri Slope, 2011**  
**(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	88	17	17	18
<b>Operator Information</b>				
Average number of operators	1.1	1.0	1.1	1.1
Average age of operators	43.4	42.7	43.6	47.5
Average number of years farming	19.3	15.4	19.3	25.1
<b>Results Per Operator</b>				
Working capital	208,886	-25,161	152,848	516,585
Total assets (cost)	1,443,250	653,080	780,681	3,213,114
Total liabilities	666,940	460,499	319,461	1,342,587
Net worth (cost)	776,310	192,581	461,219	1,870,527
Gross farm income	568,863	204,507	298,582	1,450,742
Total farm expense	433,346	223,665	215,286	1,058,067
Net farm income from operations	135,518	-19,158	83,296	392,674
Net nonfarm income	54,193	67,189	83,859	50,539
Family living & tax withdrawals	57,504	57,120	40,467	97,108
Total acres owned	964.3	458.1	680.3	1,679.5
Total crop acres	1,819.0	841.2	939.3	4,380.1
Crop acres owned	489.8	211.6	210.0	1,235.0
Crop acres cash rented	1,218.3	576.4	680.7	2,854.6
Crop acres share rented	110.9	53.3	48.6	290.5
Total pasture acres	2,498.4	1,067.0	3,052.5	3,821.5
<b>Labor Analysis</b>				
Number of farms	86	16	17	18
Total unpaid labor hours	2,266	1,428	2,248	2,883
Total hired labor hours	750	369	148	2,335
Total labor hours per farm	3,015	1,797	2,396	5,218
Unpaid hours per operator	2,147	1,428	2,012	2,732

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**Nonfarm Summary**  
**North Dakota Farm Business Management Education**  
**Region 4 - Western Missouri Slope, 2011**  
**(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	88	17	17	18
<b>Nonfarm Income</b>				
Personal wages & salary	24,512	47,137	28,999	12,370
Net nonfarm business income	4,698	11,795	133	1,203
Personal rental income	-3	-15	-	-
Personal interest income	60	3	123	84
Personal cash dividends	7	-127	-	-
Tax refunds	2,275	4,804	2,357	530
Other nonfarm income	25,569	3,591	62,111	39,161
Total nonfarm income	57,118	67,189	93,724	53,347
Gifts and inheritances	1,626	530	6,560	-



**Financial Summary**  
**North Dakota Farm Business Management Education**  
**Region 4 - Western Missouri Slope, 2011**  
**(Farms Sorted By Gross Farm Income)**

	<u>Avg. Of</u> <u>All Farms</u>	<u>Less than</u> <u>50,000</u>	<u>50,001 -</u> <u>100,000</u>	<u>100,001 -</u> <u>250,000</u>	<u>250,001 -</u> <u>500,000</u>	<u>500,001 -</u> <u>1,000,000</u>	<u>Over</u> <u>1,000,000</u>
Number of farms	88	5	9	18	20	19	17
<b>Income Statement</b>							
Gross cash farm income	626,157	36,558	65,579	167,440	326,556	752,091	1,793,768
Total cash farm expense	434,109	29,613	82,786	119,123	283,116	530,098	1,142,943
Net cash farm income	192,048	6,944	-17,207	48,317	43,440	221,993	650,825
Inventory change	-16,235	44,647	38,976	15,358	51,817	-21,230	-171,299
Depreciation	-32,981	-4,035	-6,157	-9,348	-14,684	-35,430	-99,507
Net farm income from operations	142,833	47,556	15,612	54,327	80,572	165,333	380,019
Gain or loss on capital sales	8,267	27	-115	5	185	3,552	38,655
Average net farm income	151,100	47,583	15,498	54,332	80,757	168,885	418,673
Median net farm income	95,977	47,751	9,516	67,135	82,033	186,719	394,312
<b>Profitability (cost)</b>							
Rate of return on assets	9.7 %	22.3 %	2.1 %	7.6 %	8.4 %	8.7 %	11.5 %
Rate of return on equity	14.7 %	64.2 %	-1.6 %	10.3 %	13.7 %	12.9 %	17.3 %
Operating profit margin	22.7 %	44.5 %	9.1 %	24.8 %	19.5 %	21.6 %	24.1 %
Asset turnover rate	42.7 %	50.3 %	23.4 %	30.7 %	43.3 %	40.2 %	47.5 %
<b>Liquidity &amp; Repayment (end of year)</b>							
Current assets	432,899	70,388	113,085	133,625	289,843	604,450	1,070,033
Current liabilities	233,426	29,507	42,813	59,416	192,307	306,134	578,822
Current ratio	1.85	2.39	2.64	2.25	1.51	1.97	1.85
Working capital	199,473	40,881	70,272	74,209	97,536	298,316	491,211
Working capital to gross inc	33.7 %	49.4 %	67.2 %	40.3 %	25.8 %	40.5 %	30.6 %
Term debt coverage ratio	2.67	3.82	4.17	2.60	2.20	2.39	2.84
Replacement coverage ratio	2.39	3.78	4.08	2.25	2.07	2.10	2.52
<b>Solvency (end of year at cost)</b>							
Number of sole proprietors	84	5	9	18	20	16	16
Total farm assets	1,334,181	187,596	458,434	562,215	889,969	1,732,238	3,210,766
Total farm liabilities	653,439	119,818	229,207	272,395	530,350	862,226	1,432,577
Total assets	1,485,114	202,536	598,332	673,245	984,184	1,896,823	3,512,540
Total liabilities	688,952	132,596	281,522	303,646	560,398	915,684	1,459,424
Net worth	796,162	69,940	316,810	369,599	423,785	981,139	2,053,116
Net worth change	152,931	41,794	125,807	73,715	78,586	155,622	382,278
Farm debt to asset ratio	49 %	64 %	50 %	48 %	60 %	50 %	45 %
Total debt to asset ratio	46 %	65 %	47 %	45 %	57 %	48 %	42 %
<b>Nonfarm Information</b>							
Net nonfarm income	57,118	22,847	157,257	47,220	44,302	35,453	63,957
Farms reporting living expenses	54	3	6	15	10	10	10
Total family living expense	56,594	-	55,521	47,405	49,757	60,906	82,927
<b>Crop Acres</b>							
Total acres owned	1,016	-	298	801	847	1,418	1,674
Total crop acres	1,917	247	534	415	1,269	2,452	4,896
Total crop acres owned	516	-	196	186	352	734	1,136
Total crop acres cash rented	1,284	187	239	199	851	1,622	3,441
Total crop acres share rented	117	60	99	30	65	95	320

**Financial Summary**  
**North Dakota Farm Business Management Education**  
**Region 4 - Western Missouri Slope, 2011**  
**(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	88	16	16	22	28	6
<b>Income Statement</b>						
Gross cash farm income	626,157	380,995	445,749	734,056	772,054	684,531
Total cash farm expense	434,109	248,546	324,181	511,715	519,397	539,521
Net cash farm income	192,048	132,449	121,568	222,341	252,657	145,010
Inventory change	-16,235	-41,302	37,982	-78,627	6,456	28,914
Depreciation	-32,981	-13,466	-28,083	-32,108	-49,177	-25,702
Net farm income from operations	142,833	77,681	131,467	111,606	209,937	148,221
Gain or loss on capital sales	8,267	-676	469	33,266	-36	-
Average net farm income	151,100	77,005	131,936	144,872	209,901	148,221
Median net farm income	95,977	61,312	65,413	95,977	166,995	118,389
<b>Profitability (cost)</b>						
Rate of return on assets	9.7 %	10.1 %	12.6 %	7.3 %	10.4 %	8.6 %
Rate of return on equity	14.7 %	24.8 %	27.6 %	9.7 %	14.2 %	12.6 %
Operating profit margin	22.7 %	22.3 %	25.3 %	17.2 %	25.9 %	19.9 %
Asset turnover rate	42.7 %	45.5 %	49.9 %	42.5 %	40.1 %	43.3 %
<b>Liquidity &amp; Repayment (end of year)</b>						
Current assets	432,899	208,528	328,458	452,928	598,541	549,460
Current liabilities	233,426	136,178	206,742	250,568	278,671	315,392
Current ratio	1.85	1.53	1.59	1.81	2.15	1.74
Working capital	199,473	72,351	121,716	202,360	319,870	234,068
Working capital to gross inc	33.7 %	21.0 %	25.5 %	30.9 %	42.8 %	34.4 %
Term debt coverage ratio	2.67	2.33	2.42	1.79	3.39	3.44
Replacement coverage ratio	2.39	2.29	2.34	1.70	2.78	2.99
<b>Solvency (end of year at cost)</b>						
Number of sole proprietors	84	16	16	21	25	6
Total farm assets	1,334,181	721,605	1,006,065	1,361,912	1,864,502	1,535,962
Total farm liabilities	653,439	500,751	622,059	685,278	736,538	686,609
Total assets	1,485,114	770,203	1,102,814	1,508,442	2,119,860	1,684,581
Total liabilities	688,952	528,872	658,810	732,107	773,945	691,035
Net worth	796,162	241,331	444,004	776,336	1,345,916	993,546
Net worth change	152,931	83,517	114,119	129,083	234,289	186,013
Farm debt to asset ratio	49 %	69 %	62 %	50 %	40 %	45 %
Total debt to asset ratio	46 %	69 %	60 %	49 %	37 %	41 %
<b>Nonfarm Information</b>						
Net nonfarm income	57,118	38,002	35,223	42,279	85,654	87,730
Farms reporting living expenses	54	11	8	12	18	5
Total family living expense	56,594	35,753	57,421	61,575	63,976	62,594
<b>Crop Acres</b>						
Total acres owned	1,016	311	396	1,243	1,376	2,043
Total crop acres	1,917	1,015	1,443	1,861	2,690	2,187
Total crop acres owned	516	134	261	490	816	912
Total crop acres cash rented	1,284	864	1,099	1,303	1,639	1,175
Total crop acres share rented	117	17	83	68	236	99

**Financial Summary**  
**North Dakota Farm Business Management Education**  
**Region 4 - Western Missouri Slope, 2011**  
**(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	88	19	18	21	28
<b>Income Statement</b>					
Gross cash farm income	626,157	948,777	152,314	910,623	505,485
Total cash farm expense	434,109	641,032	103,474	606,521	376,033
Net cash farm income	192,048	307,745	48,839	304,102	129,452
Inventory change	-16,235	16,463	21,086	-53,190	-37,417
Depreciation	-32,981	-50,398	-6,594	-61,253	-18,577
Net farm income from operations	142,833	273,809	63,332	189,659	73,459
Gain or loss on capital sales	8,267	1,717	1,950	714	23,028
Average net farm income	151,100	275,526	65,282	190,374	96,487
Median net farm income	95,977	201,517	53,194	141,159	76,617
<b>Profitability (cost)</b>					
Rate of return on assets	9.7 %	13.3 %	9.0 %	9.2 %	6.2 %
Rate of return on equity	14.7 %	20.6 %	12.8 %	14.1 %	7.3 %
Operating profit margin	22.7 %	25.3 %	32.3 %	23.6 %	15.0 %
Asset turnover rate	42.7 %	52.3 %	27.9 %	39.0 %	41.5 %
<b>Liquidity &amp; Repayment (end of year)</b>					
Current assets	432,899	725,241	151,567	621,824	304,466
Current liabilities	233,426	343,692	62,632	364,927	192,194
Current ratio	1.85	2.11	2.42	1.70	1.58
Working capital	199,473	381,549	88,935	256,897	112,272
Working capital to gross inc	33.7 %	37.8 %	50.6 %	30.3 %	26.8 %
Term debt coverage ratio	2.67	3.01	2.82	2.73	2.24
Replacement coverage ratio	2.39	2.74	2.51	2.42	2.01
<b>Solvency (end of year at cost)</b>					
Number of sole proprietors	84	17	18	20	27
Total farm assets	1,334,181	1,919,692	607,228	1,980,875	980,173
Total farm liabilities	653,439	803,846	270,452	992,262	554,615
Total assets	1,485,114	2,144,211	700,685	2,141,529	1,117,890
Total liabilities	688,952	841,644	304,133	1,022,156	590,678
Net worth	796,162	1,302,567	396,553	1,119,373	527,212
Net worth change	152,931	242,117	74,540	204,531	114,262
Farm debt to asset ratio	49 %	42 %	45 %	50 %	57 %
Total debt to asset ratio	46 %	39 %	43 %	48 %	53 %
<b>Nonfarm Information</b>					
Net nonfarm income	57,118	32,683	40,238	61,163	82,404
Farms reporting living expenses	54	11	15	7	20
Total family living expense	56,594	77,173	39,433	67,180	55,153
<b>Crop Acres</b>					
Total acres owned	1,016	1,065	1,111	1,387	698
Total crop acres	1,917	3,295	387	2,512	1,596
Total crop acres owned	516	790	150	986	234
Total crop acres cash rented	1,284	2,277	202	1,350	1,305
Total crop acres share rented	117	228	35	176	58

## 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**  
**Region 4 - Western Missouri Slope, 2011**  
**(Farms Sorted By Net Return)**

**Barley on Owned Land**

	<b>Avg. Of All Farms</b>
Number of fields	6
Number of farms	5
Acres	91.71
Yield per acre (bu.)	36.50
Operators share of yield %	100.00
Value per bu.	4.42
Other product return per acre	6.10
Total product return per acre	167.56
Crop insurance per acre	10.18
Gross return per acre	177.75
<b>Direct Expenses</b>	
Seed	9.67
Fertilizer	37.27
Crop chemicals	17.20
Crop insurance	12.87
Fuel & oil	8.06
Repairs	10.14
Custom hire	19.28
Operating interest	2.33
Total direct expenses per acre	116.81
Return over direct exp per acre	60.94
<b>Overhead Expenses</b>	
Hired labor	5.80
Machinery leases	3.67
RE & pers. property taxes	3.09
Farm insurance	1.84
Utilities	1.05
Dues & professional fees	0.55
Interest	7.38
Mach & bldg depreciation	4.06
Miscellaneous	2.75
Total overhead expenses per acre	30.18
Total dir & ovhd expenses per acre	146.99
Net return per acre	30.75
Government payments	5.79
Net return with govt pmts	36.55
Labor & management charge	12.77
Net return over lbr & mgt	23.78
<b>Cost of Production</b>	
Total direct expense per bu.	3.20
Total dir & ovhd exp per bu.	4.03
Less govt & other income	3.42
With labor & management	3.77
Net value per unit	4.42
Machinery cost per acre	46.82
Est. labor hours per acre	1.22

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education**  
**Region 4 - Western Missouri Slope, 2011**  
**(Farms Sorted By Net Return)**

**Barley on Cash Rent**

	<b>Avg. Of All Farms</b>
Number of fields	7
Number of farms	7
Acres	376.16
Yield per acre (bu.)	26.73
Operators share of yield %	100.00
Value per bu.	4.75
Total product return per acre	126.94
Crop insurance per acre	73.15
Gross return per acre	200.09
<b>Direct Expenses</b>	
Seed	12.03
Fertilizer	50.39
Crop chemicals	28.36
Crop insurance	17.83
Fuel & oil	18.00
Repairs	17.74
Custom hire	4.89
Hired labor	5.48
Land rent	34.72
Operating interest	0.99
Miscellaneous	0.54
Total direct expenses per acre	190.98
Return over direct exp per acre	9.11
<b>Overhead Expenses</b>	
Hired labor	3.70
Machinery leases	2.20
Farm insurance	2.29
Utilities	1.32
Dues & professional fees	0.43
Interest	5.30
Mach & bldg depreciation	14.31
Miscellaneous	2.83
Total overhead expenses per acre	32.38
Total dir & ovhd expenses per acre	223.36
Net return per acre	-23.27
Government payments	7.87
Net return with govt pmts	-15.40
Labor & management charge	24.50
Net return over lbr & mgt	-39.90
<b>Cost of Production</b>	
Total direct expense per bu.	7.14
Total dir & ovhd exp per bu.	8.36
Less govt & other income	5.32
With labor & management	6.24
Net value per unit	4.75
Machinery cost per acre	61.59
Est. labor hours per acre	1.30

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education**  
**Region 4 - Western Missouri Slope, 2011**  
**(Farms Sorted By Net Return)**

**Canola on Owned Land**

	<b>Avg. Of All Farms</b>
Number of fields	5
Number of farms	5
Acres	206.05
Yield per acre (cwt.)	12.96
Operators share of yield %	100.00
Value per cwt.	22.84
Total product return per acre	296.14
Crop insurance per acre	21.13
Gross return per acre	317.26
<b>Direct Expenses</b>	
Seed	50.75
Fertilizer	72.97
Crop chemicals	13.53
Crop insurance	13.40
Fuel & oil	13.84
Repairs	20.18
Custom hire	12.82
Operating interest	5.69
Total direct expenses per acre	203.26
Return over direct exp per acre	114.00
<b>Overhead Expenses</b>	
Hired labor	8.32
Machinery leases	0.51
RE & pers. property taxes	2.26
Farm insurance	1.51
Utilities	2.33
Interest	17.09
Mach & bldg depreciation	13.02
Miscellaneous	1.59
Total overhead expenses per acre	46.62
Total dir & ovhd expenses per acre	249.88
Net return per acre	67.38
Government payments	6.18
Net return with govt pmts	73.56
Labor & management charge	26.36
Net return over lbr & mgt	47.20
<b>Cost of Production</b>	
Total direct expense per cwt.	15.68
Total dir & ovhd exp per cwt.	19.27
Less govt & other income	17.17
With labor & management	19.20
Net value per unit	22.84
Machinery cost per acre	62.06
Est. labor hours per acre	1.40

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education**  
**Region 4 - Western Missouri Slope, 2011**  
**(Farms Sorted By Net Return)**

**Canola on Cash Rent**

	<u>Avg. Of All Farms</u>
Number of fields	9
Number of farms	8
Acres	243.09
Yield per acre (cwt.)	15.52
Operators share of yield %	100.00
Value per cwt.	23.01
Total product return per acre	357.10
Crop insurance per acre	9.51
Gross return per acre	366.61
<b>Direct Expenses</b>	
Seed	47.31
Fertilizer	64.32
Crop chemicals	14.95
Crop insurance	14.66
Fuel & oil	14.36
Repairs	24.03
Custom hire	19.22
Land rent	35.65
Operating interest	2.71
Total direct expenses per acre	237.23
Return over direct exp per acre	129.38
<b>Overhead Expenses</b>	
Hired labor	6.04
Machinery leases	1.70
Farm insurance	2.66
Utilities	2.28
Interest	2.43
Mach & bldg depreciation	24.70
Miscellaneous	3.04
Total overhead expenses per acre	42.86
Total dir & ovhd expenses per acre	280.08
Net return per acre	86.53
Government payments	7.68
Net return with govt pmts	94.20
Labor & management charge	22.35
Net return over lbr & mgt	71.85
<b>Cost of Production</b>	
Total direct expense per cwt.	15.29
Total dir & ovhd exp per cwt.	18.05
Less govt & other income	16.94
With labor & management	18.38
Net value per unit	23.01
Machinery cost per acre	82.89
Est. labor hours per acre	1.27



**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education**  
**Region 4 - Western Missouri Slope, 2011**  
**(Farms Sorted By Net Return)**

**Corn on Owned Land**

	<b>Avg. Of All Farms</b>
Number of fields	19
Number of farms	14
Acres	88.85
Yield per acre (bu.)	85.38
Operators share of yield %	100.00
Value per bu.	6.09
Other product return per acre	0.52
Total product return per acre	520.14
Other crop income per acre	0.07
Gross return per acre	520.20
<b>Direct Expenses</b>	
Seed	49.38
Fertilizer	65.27
Crop chemicals	15.53
Crop insurance	13.70
Fuel & oil	20.59
Repairs	27.69
Custom hire	18.68
Machinery leases	1.76
Operating interest	8.55
Miscellaneous	0.14
Total direct expenses per acre	221.28
Return over direct exp per acre	298.92
<b>Overhead Expenses</b>	
Hired labor	4.54
Machinery leases	0.77
Building leases	0.53
RE & pers. property taxes	3.94
Farm insurance	2.75
Utilities	2.98
Dues & professional fees	0.24
Interest	20.07
Mach & bldg depreciation	24.74
Miscellaneous	4.29
Total overhead expenses per acre	64.85
Total dir & ovhd expenses per acre	286.13
Net return per acre	234.07
Government payments	7.14
Net return with govt pmts	241.21
Labor & management charge	35.47
Net return over lbr & mgt	205.75
<b>Cost of Production</b>	
Total direct expense per bu.	2.59
Total dir & ovhd exp per bu.	3.35
Less govt & other income	3.26
With labor & management	3.68
Net value per unit	6.09
Machinery cost per acre	96.84
Est. labor hours per acre	1.90

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education**  
**Region 4 - Western Missouri Slope, 2011**  
**(Farms Sorted By Net Return)**

**Corn on Cash Rent**

	<b>Avg. Of All Farms</b>
Number of fields	23
Number of farms	20
Acres	212.41
Yield per acre (bu.)	84.36
Operators share of yield %	100.00
Value per bu.	6.02
Other product return per acre	0.74
Total product return per acre	508.85
Gross return per acre	508.85
<b>Direct Expenses</b>	
Seed	52.31
Fertilizer	56.46
Crop chemicals	21.29
Crop insurance	19.16
Fuel & oil	18.17
Repairs	21.59
Custom hire	12.94
Land rent	30.49
Machinery leases	1.69
Operating interest	7.62
Miscellaneous	0.36
Total direct expenses per acre	242.08
Return over direct exp per acre	266.77
<b>Overhead Expenses</b>	
Hired labor	9.65
Machinery leases	3.31
Building leases	0.53
Farm insurance	2.08
Utilities	2.12
Interest	5.25
Mach & bldg depreciation	17.67
Miscellaneous	3.19
Total overhead expenses per acre	43.80
Total dir & ovhd expenses per acre	285.88
Net return per acre	222.97
Government payments	6.05
Net return with govt pmts	229.02
Labor & management charge	24.96
Net return over lbr & mgt	204.06
<b>Cost of Production</b>	
Total direct expense per bu.	2.87
Total dir & ovhd exp per bu.	3.39
Less govt & other income	3.31
With labor & management	3.60
Net value per unit	6.02
Machinery cost per acre	79.31
Est. labor hours per acre	1.41

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education**  
**Region 4 - Western Missouri Slope, 2011**  
**(Farms Sorted By Net Return)**

**Corn Silage on Owned Land**

	<b>Avg. Of All Farms</b>
Number of fields	10
Number of farms	7
Acres	86.86
Yield per acre (ton)	14.51
Operators share of yield %	100.00
Value per ton	27.56
Total product return per acre	399.94
Gross return per acre	399.94
<b>Direct Expenses</b>	
Seed	37.37
Fertilizer	55.95
Crop chemicals	19.71
Crop insurance	12.70
Fuel & oil	19.66
Repairs	25.77
Custom hire	42.12
Machinery leases	0.66
Operating interest	6.17
Total direct expenses per acre	220.12
Return over direct exp per acre	179.82
<b>Overhead Expenses</b>	
Hired labor	18.14
Machinery leases	4.62
Building leases	0.39
RE & pers. property taxes	3.06
Farm insurance	1.59
Utilities	1.81
Interest	15.17
Mach & bldg depreciation	12.61
Miscellaneous	1.78
Total overhead expenses per acre	59.19
Total dir & ovhd expenses per acre	279.31
Net return per acre	120.64
Government payments	7.23
Net return with govt pmts	127.87
Labor & management charge	22.85
Net return over lbr & mgt	105.02
<b>Cost of Production</b>	
Total direct expense per ton	15.17
Total dir & ovhd exp per ton	19.24
Less govt & other income	18.75
With labor & management	20.32
Net value per unit	27.56
Machinery cost per acre	108.78
Est. labor hours per acre	2.25

**Crop Enterprise Analysis**  
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**Corn Silage on Cash Rent**

	<b>Avg. Of All Farms</b>
Number of fields	7
Number of farms	7
Acres	51.06
Yield per acre (ton)	11.73
Operators share of yield %	100.00
Value per ton	30.20
Total product return per acre	354.35
Gross return per acre	354.35
<b>Direct Expenses</b>	
Seed	45.27
Fertilizer	59.71
Crop chemicals	11.44
Crop insurance	10.68
Fuel & oil	22.52
Repairs	21.74
Custom hire	47.76
Land rent	29.52
Machinery leases	1.87
Operating interest	10.12
Miscellaneous	0.02
Total direct expenses per acre	260.64
Return over direct exp per acre	93.71
<b>Overhead Expenses</b>	
Hired labor	10.29
Machinery leases	1.48
Building leases	0.74
Farm insurance	2.98
Utilities	2.10
Dues & professional fees	0.19
Interest	3.37
Mach & bldg depreciation	13.78
Miscellaneous	3.08
Total overhead expenses per acre	38.01
Total dir & ovhd expenses per acre	298.66
Net return per acre	55.70
Government payments	6.17
Net return with govt pmts	61.87
Labor & management charge	29.05
Net return over lbr & mgt	32.82
<b>Cost of Production</b>	
Total direct expense per ton	22.22
Total dir & ovhd exp per ton	25.46
Less govt & other income	24.93
With labor & management	27.41
Net value per unit	30.20
Machinery cost per acre	112.04
Est. labor hours per acre	2.63

**Crop Enterprise Analysis**  
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**Flax on Cash Rent**

	<b>Avg. Of All Farms</b>
Number of fields	12
Number of farms	5
Acres	95.61
Yield per acre (bu.)	13.83
Operators share of yield %	100.00
Value per bu.	13.82
Other product return per acre	0.22
Total product return per acre	191.38
Crop insurance per acre	55.30
Gross return per acre	246.68
<b>Direct Expenses</b>	
Seed	15.24
Fertilizer	28.95
Crop chemicals	19.75
Crop insurance	8.84
Fuel & oil	10.80
Repairs	10.08
Custom hire	2.92
Land rent	32.44
Operating interest	3.23
Total direct expenses per acre	132.25
Return over direct exp per acre	114.43
<b>Overhead Expenses</b>	
Hired labor	3.29
Machinery leases	0.76
Farm insurance	1.57
Utilities	1.00
Dues & professional fees	0.38
Interest	1.31
Mach & bldg depreciation	13.59
Miscellaneous	3.02
Total overhead expenses per acre	24.91
Total dir & ovhd expenses per acre	157.16
Net return per acre	89.52
Government payments	7.27
Net return with govt pmts	96.79
Labor & management charge	23.53
Net return over lbr & mgt	73.26
<b>Cost of Production</b>	
Total direct expense per bu.	9.56
Total dir & ovhd exp per bu.	11.36
Less govt & other income	6.82
With labor & management	8.53
Net value per unit	13.82
Machinery cost per acre	39.26
Est. labor hours per acre	1.01

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**Hay, Alfalfa on Owned Land**

	<b>Avg. Of All Farms</b>
Number of fields	12
Number of farms	10
Acres	59.90
Yield per acre (ton)	3.01
Operators share of yield %	100.00
Value per ton	58.46
Total product return per acre	175.93
Gross return per acre	175.93
<b>Direct Expenses</b>	
Fertilizer	1.74
Crop insurance	5.43
Fuel & oil	12.73
Repairs	14.48
Operating interest	1.45
Total direct expenses per acre	35.83
Return over direct exp per acre	140.10
<b>Overhead Expenses</b>	
Hired labor	5.95
Machinery leases	1.78
RE & pers. property taxes	3.08
Farm insurance	2.20
Utilities	1.82
Interest	9.71
Mach & bldg depreciation	9.28
Miscellaneous	1.87
Total overhead expenses per acre	35.69
Total dir & ovhd expenses per acre	71.52
Net return per acre	104.41
Government payments	6.38
Net return with govt pmts	110.79
Labor & management charge	14.20
Net return over lbr & mgt	96.59
<b>Cost of Production</b>	
Total direct expense per ton	11.91
Total dir & ovhd exp per ton	23.77
Less govt & other income	21.65
With labor & management	26.37
Net value per unit	58.46
Machinery cost per acre	39.31
Est. labor hours per acre	0.96

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**Hay, Alfalfa on Cash Rent**

	<u>Avg. Of All Farms</u>
Number of fields	17
Number of farms	17
Acres	133.35
Yield per acre (ton)	2.84
Operators share of yield %	100.00
Value per ton	55.66
Other product return per acre	2.41
Total product return per acre	160.35
Gross return per acre	160.35
<b>Direct Expenses</b>	
Fertilizer	1.32
Crop insurance	3.12
Fuel & oil	8.30
Repairs	10.53
Custom hire	1.66
Land rent	23.97
Operating interest	4.36
Miscellaneous	0.22
Total direct expenses per acre	53.48
Return over direct exp per acre	106.87
<b>Overhead Expenses</b>	
Hired labor	4.46
Machinery leases	3.88
Farm insurance	1.96
Utilities	1.68
Dues & professional fees	0.82
Interest	4.79
Mach & bldg depreciation	7.36
Miscellaneous	1.25
Total overhead expenses per acre	26.19
Total dir & ovhd expenses per acre	79.67
Net return per acre	80.68
Government payments	4.55
Net return with govt pmts	85.23
Labor & management charge	12.09
Net return over lbr & mgt	73.14
<b>Cost of Production</b>	
Total direct expense per ton	18.85
Total dir & ovhd exp per ton	28.08
Less govt & other income	25.63
With labor & management	29.89
Net value per unit	55.66
Machinery cost per acre	35.90
Est. labor hours per acre	0.87

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

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of fields	29	5	5	7
Number of farms	25	5	5	5
Acres	188.49	209.70	293.91	111.39
Yield per acre (ton)	1.69	1.47	1.40	2.05
Operators share of yield %	100.00	100.00	100.00	100.00
Value per ton	51.16	44.92	55.34	59.19
Other product return per acre	0.18	0.94	-	-
Total product return per acre	86.71	67.06	77.48	121.60
Other crop income per acre	0.14	-	-	-
Gross return per acre	86.85	67.06	77.48	121.60
<b>Direct Expenses</b>				
Crop insurance	1.46	1.35	0.25	1.16
Fuel & oil	9.54	13.11	8.11	8.89
Repairs	10.78	14.53	8.19	8.20
Custom hire	1.28	-	1.50	2.35
Operating interest	2.71	3.04	1.30	1.09
Miscellaneous	0.47	-	-	0.58
Total direct expenses per acre	26.23	32.02	19.35	22.28
Return over direct exp per acre	60.62	35.04	58.14	99.33
<b>Overhead Expenses</b>				
Custom hire	0.38	-	1.40	-
Hired labor	3.62	2.35	5.59	0.56
RE & pers. property taxes	2.74	2.80	2.78	2.02
Farm insurance	2.26	3.13	2.43	1.86
Utilities	1.31	1.55	1.29	1.19
Interest	10.91	10.63	13.14	4.10
Mach & bldg depreciation	5.83	8.36	5.06	3.85
Miscellaneous	1.25	2.00	1.01	0.64
Total overhead expenses per acre	28.29	30.83	32.71	14.21
Total dir & ovhd expenses per acre	54.52	62.85	52.06	36.48
Net return per acre	32.34	4.21	25.42	85.12
Government payments	3.57	4.18	1.39	2.63
Net return with govt pmts	35.91	8.39	26.82	87.75
Labor & management charge	12.14	13.58	9.27	17.09
Net return over lbr & mgt	23.77	-5.19	17.55	70.66
<b>Cost of Production</b>				
Total direct expense per ton	15.51	21.76	13.82	10.84
Total dir & ovhd exp per ton	32.23	42.71	37.18	17.76
Less govt & other income	29.93	39.22	36.19	16.48
With labor & management	37.11	48.45	42.81	24.79
Net value per unit	51.16	44.92	55.34	59.19
Machinery cost per acre	30.16	38.07	26.45	25.16
Est. labor hours per acre	0.79	0.78	0.52	1.04



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

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of fields	62	16	13	12
Number of farms	39	7	8	8
Acres	215.91	54.37	209.61	166.44
Yield per acre (ton)	1.80	1.54	1.67	2.21
Operators share of yield %	100.00	100.00	100.00	100.00
Value per ton	51.24	44.44	49.72	53.45
Other product return per acre	0.28	1.12	-	1.42
Total product return per acre	92.53	69.57	83.10	119.28
Crop insurance per acre	0.00	-	0.02	-
Other crop income per acre	0.06	0.95	-	-
Gross return per acre	92.59	70.52	83.11	119.28
<b>Direct Expenses</b>				
Fertilizer	0.77	-	1.41	-
Crop insurance	0.83	0.97	1.16	0.64
Fuel & oil	8.56	7.73	7.83	7.56
Repairs	9.09	11.37	6.55	5.83
Custom hire	2.36	2.71	2.54	1.25
Land rent	19.32	27.52	20.63	16.56
Operating interest	2.55	4.55	2.07	1.30
Miscellaneous	0.28	1.66	0.21	0.47
Total direct expenses per acre	43.77	56.51	42.40	33.62
Return over direct exp per acre	48.82	14.01	40.71	85.67
<b>Overhead Expenses</b>				
Custom hire	0.14	-	0.70	-
Hired labor	2.97	3.83	2.85	0.15
Machinery leases	0.50	0.30	0.50	-
Farm insurance	1.82	2.01	2.15	2.23
Utilities	1.69	2.02	2.10	1.21
Dues & professional fees	0.23	0.52	0.12	0.56
Interest	3.46	5.17	5.25	1.87
Mach & bldg depreciation	5.64	7.94	5.66	4.79
Miscellaneous	1.36	0.71	0.02	1.02
Total overhead expenses per acre	17.80	22.50	19.36	11.84
Total dir & ovhd expenses per acre	61.57	79.01	61.77	45.45
Net return per acre	31.02	-8.49	21.35	73.83
Government payments	3.12	5.24	2.80	1.32
Net return with govt pmts	34.15	-3.25	24.15	75.15
Labor & management charge	11.58	13.53	13.34	16.38
Net return over lbr & mgt	22.57	-16.78	10.81	58.78
<b>Cost of Production</b>				
Total direct expense per ton	24.31	36.69	25.37	15.24
Total dir & ovhd exp per ton	34.20	51.30	36.96	20.61
Less govt & other income	32.27	46.55	35.28	19.37
With labor & management	38.70	55.33	43.26	26.80
Net value per unit	51.24	44.44	49.72	53.45
Machinery cost per acre	29.44	34.57	28.84	20.98
Est. labor hours per acre	0.76	0.90	0.70	1.22

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

	<b>Avg. Of All Farms</b>
Number of fields	9
Number of farms	9
Acres	141.11
Yield per acre (ton)	1.91
Operators share of yield %	58.10
Value per ton	52.76
Total product return per acre	58.51
Gross return per acre	58.51
<b>Direct Expenses</b>	
Fuel & oil	7.85
Repairs	9.56
Custom hire	0.55
Operating interest	2.49
Miscellaneous	0.89
Total direct expenses per acre	21.34
Return over direct exp per acre	37.17
<b>Overhead Expenses</b>	
Hired labor	1.08
Machinery leases	0.27
Farm insurance	2.15
Utilities	1.25
Interest	3.54
Mach & bldg depreciation	5.10
Miscellaneous	0.85
Total overhead expenses per acre	14.24
Total dir & ovhd expenses per acre	35.58
Net return per acre	22.93
Government payments	0.60
Net return with govt pmts	23.53
Labor & management charge	15.69
Net return over lbr & mgt	7.84
<b>Cost of Production</b>	
Total direct expense per ton	19.24
Total dir & ovhd exp per ton	32.08
Less govt & other income	31.54
With labor & management	45.69
Net value per unit	52.76
Machinery cost per acre	26.62
Est. labor hours per acre	0.79

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**Hay, Small Grain on Owned Land**

	<b>Avg. Of All Farms</b>
Number of fields	11
Number of farms	10
Acres	66.41
Yield per acre (ton)	1.99
Operators share of yield %	100.00
Value per ton	50.18
Total product return per acre	99.79
Gross return per acre	99.79
<b>Direct Expenses</b>	
Seed	8.87
Fertilizer	29.86
Crop chemicals	12.88
Crop insurance	5.51
Fuel & oil	9.65
Repairs	10.85
Custom hire	9.56
Operating interest	2.01
Total direct expenses per acre	89.21
Return over direct exp per acre	10.59
<b>Overhead Expenses</b>	
Hired labor	3.44
RE & pers. property taxes	2.94
Farm insurance	1.68
Utilities	1.39
Interest	8.69
Mach & bldg depreciation	5.03
Miscellaneous	4.15
Total overhead expenses per acre	27.31
Total dir & ovhd expenses per acre	116.52
Net return per acre	-16.73
Government payments	7.09
Net return with govt pmts	-9.64
Labor & management charge	15.82
Net return over lbr & mgt	-25.46
<b>Cost of Production</b>	
Total direct expense per ton	44.85
Total dir & ovhd exp per ton	58.59
Less govt & other income	55.02
With labor & management	62.98
Net value per unit	50.18
Machinery cost per acre	37.40
Est. labor hours per acre	1.22

**Crop Enterprise Analysis**  
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**Hay, Small Grain on Cash Rent**

	<b>Avg. Of All Farms</b>
Number of fields	11
Number of farms	10
Acres	55.44
Yield per acre (ton)	2.20
Operators share of yield %	100.00
Value per ton	45.20
Other product return per acre	1.60
Total product return per acre	101.01
Other crop income per acre	1.81
Gross return per acre	102.82
<b>Direct Expenses</b>	
Seed	13.47
Fertilizer	43.86
Crop chemicals	6.51
Crop insurance	5.92
Fuel & oil	8.81
Repairs	10.25
Custom hire	3.34
Land rent	26.27
Operating interest	2.35
Miscellaneous	0.50
Total direct expenses per acre	121.28
Return over direct exp per acre	-18.46
<b>Overhead Expenses</b>	
Hired labor	3.76
Machinery leases	0.52
Farm insurance	2.31
Utilities	2.01
Dues & professional fees	0.51
Interest	3.97
Mach & bldg depreciation	8.50
Miscellaneous	3.92
Total overhead expenses per acre	25.49
Total dir & ovhd expenses per acre	146.77
Net return per acre	-43.95
Government payments	6.62
Net return with govt pmts	-37.32
Labor & management charge	18.00
Net return over lbr & mgt	-55.32
<b>Cost of Production</b>	
Total direct expense per ton	55.14
Total dir & ovhd exp per ton	66.73
Less govt & other income	62.17
With labor & management	70.35
Net value per unit	45.20
Machinery cost per acre	34.55
Est. labor hours per acre	1.22

**Crop Enterprise Analysis**  
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**Lentils on Cash Rent**

	<b>Avg. Of All Farms</b>
Number of fields	7
Number of farms	5
Acres	238.98
Yield per acre (cwt.)	14.08
Operators share of yield %	100.00
Value per cwt.	24.83
Total product return per acre	349.71
Crop insurance per acre	24.96
Gross return per acre	374.67
<b>Direct Expenses</b>	
Seed	18.22
Fertilizer	7.45
Crop chemicals	31.21
Crop insurance	10.81
Fuel & oil	12.96
Repairs	19.58
Custom hire	1.85
Hired labor	1.79
Land rent	28.73
Machinery leases	0.56
Operating interest	5.00
Miscellaneous	0.42
Total direct expenses per acre	138.58
Return over direct exp per acre	236.09
<b>Overhead Expenses</b>	
Custom hire	1.82
Hired labor	8.70
Machinery leases	1.63
Farm insurance	2.79
Utilities	0.95
Dues & professional fees	0.31
Interest	3.83
Mach & bldg depreciation	11.67
Miscellaneous	1.80
Total overhead expenses per acre	33.51
Total dir & ovhd expenses per acre	172.09
Net return per acre	202.58
Government payments	7.81
Net return with govt pmts	210.39
Labor & management charge	24.89
Net return over lbr & mgt	185.50
<b>Cost of Production</b>	
Total direct expense per cwt.	9.84
Total dir & ovhd exp per cwt.	12.22
Less govt & other income	9.89
With labor & management	11.66
Net value per unit	24.83
Machinery cost per acre	53.45
Est. labor hours per acre	1.09

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education**  
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**Oats on Owned Land**

	<b>Avg. Of All Farms</b>
Number of fields	5
Number of farms	5
Acres	37.50
Yield per acre (bu.)	54.02
Operators share of yield %	100.00
Value per bu.	2.79
Other product return per acre	8.22
Total product return per acre	159.09
Gross return per acre	159.09
<b>Direct Expenses</b>	
Seed	7.45
Fertilizer	38.46
Crop chemicals	7.47
Crop insurance	9.38
Fuel & oil	8.98
Repairs	8.30
Operating interest	2.99
Total direct expenses per acre	83.03
Return over direct exp per acre	76.06
<b>Overhead Expenses</b>	
RE & pers. property taxes	2.60
Farm insurance	1.89
Utilities	1.37
Dues & professional fees	0.41
Interest	12.04
Mach & bldg depreciation	8.20
Miscellaneous	7.74
Total overhead expenses per acre	34.26
Total dir & ovhd expenses per acre	117.29
Net return per acre	41.80
Government payments	6.87
Net return with govt pmts	48.67
Labor & management charge	19.62
Net return over lbr & mgt	29.05
<b>Cost of Production</b>	
Total direct expense per bu.	1.54
Total dir & ovhd exp per bu.	2.17
Less govt & other income	1.89
With labor & management	2.25
Net value per unit	2.79
Machinery cost per acre	28.43
Est. labor hours per acre	1.35

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education**  
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**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	66	12	15	11
Number of farms	40	8	8	8
Acres	746.68	432.88	517.61	811.41
Yield per acre (aum)	0.44	0.49	0.39	0.72
Operators share of yield %	100.00	100.00	100.00	100.00
Value per aum	18.36	17.37	18.19	19.12
Total product return per acre	8.16	8.48	7.08	13.72
Crop insurance per acre	0.05	-	0.06	-
Other crop income per acre	0.46	-	0.27	-
Gross return per acre	8.66	8.48	7.41	13.72
<b>Direct Expenses</b>				
Total direct expenses per acre	1.16	1.16	1.12	1.07
Return over direct exp per acre	7.51	7.33	6.29	12.65
<b>Overhead Expenses</b>				
RE & pers. property taxes	1.23	1.69	1.37	1.26
Interest	3.72	10.77	2.44	1.72
Mach & bldg depreciation	0.55	0.31	0.23	0.59
Miscellaneous	0.38	0.23	0.44	0.36
Total overhead expenses per acre	5.89	13.00	4.48	3.94
Total dir & ovhd expenses per acre	7.04	14.15	5.60	5.01
Net return per acre	1.62	-5.67	1.81	8.72

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education**  
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**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	131	33	23	22
Number of farms	54	10	11	11
Acres	1,124.11	541.14	1,003.62	534.88
Yield per acre (aum)	0.45	0.51	0.50	0.67
Operators share of yield %	100.00	100.00	100.00	100.00
Value per aum	17.96	17.86	19.73	19.23
Total product return per acre	8.03	9.12	9.96	12.92
Crop insurance per acre	0.02	0.03	0.01	-
Other crop income per acre	0.03	0.10	-	0.18
Gross return per acre	8.07	9.25	9.97	13.10
<b>Direct Expenses</b>				
Crop insurance	0.24	0.53	0.09	0.11
Repairs	0.42	0.68	0.44	0.44
Land rent	7.09	12.57	8.90	7.10
Total direct expenses per acre	8.26	14.42	9.91	8.23
Return over direct exp per acre	-0.19	-5.17	0.06	4.87
<b>Overhead Expenses</b>				
Mach & bldg depreciation	0.77	0.44	0.24	0.23
Miscellaneous	0.56	0.66	0.48	0.49
Total overhead expenses per acre	1.33	1.10	0.73	0.72
Total dir & ovhd expenses per acre	9.59	15.52	10.64	8.95
Net return per acre	-1.52	-6.27	-0.66	4.15



**Crop Enterprise Analysis**  
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**Prevented planting on Owned Land**

	<b>Avg. Of All Farms</b>
Number of fields	26
Number of farms	20
Acres	158.65
Yield per acre	0.00
Operators share of yield %	100.00
Value per \$	-
Total product return per acre	-
Crop insurance per acre	95.99
Other crop income per acre	0.36
Gross return per acre	96.35
<b>Direct Expenses</b>	
Seed	1.77
Fertilizer	1.68
Crop chemicals	10.96
Crop insurance	11.97
Fuel & oil	4.03
Repairs	5.14
Custom hire	5.84
Operating interest	2.05
Miscellaneous	0.27
Total direct expenses per acre	43.70
Return over direct exp per acre	52.65
<b>Overhead Expenses</b>	
Hired labor	1.62
RE & pers. property taxes	2.82
Farm insurance	2.66
Utilities	1.93
Dues & professional fees	0.69
Interest	18.02
Mach & bldg depreciation	10.36
Miscellaneous	3.69
Total overhead expenses per acre	41.79
Total dir & ovhd expenses per acre	85.49
Net return per acre	10.86
Government payments	7.59
Net return with govt pmts	18.45
Labor & management charge	6.42
Net return over lbr & mgt	12.03

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education**  
**Region 4 - Western Missouri Slope, 2011**  
**(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	76	6	17	31
Number of farms	33	6	6	7
Acres	312.60	594.51	156.57	158.58
Yield per acre	0.00	-	0.00	-
Operators share of yield %	100.00	-	100.00	-
Value per \$	-	-	-	-
Total product return per acre	-	-	-	-
Crop insurance per acre	125.31	79.37	93.22	176.87
Other crop income per acre	0.00	-	-	-
Gross return per acre	125.31	79.37	93.22	176.87
<b>Direct Expenses</b>				
Seed	0.46	3.04	-	0.01
Fertilizer	0.82	-	-	0.05
Crop chemicals	12.72	19.93	9.25	9.25
Crop insurance	16.75	11.43	14.73	19.09
Fuel & oil	4.31	4.32	3.55	5.05
Repairs	7.33	5.50	9.92	5.36
Custom hire	3.31	14.74	2.62	0.84
Hired labor	0.38	-	0.61	-
Land rent	31.32	31.21	29.76	35.56
Operating interest	2.93	1.25	1.70	1.04
Miscellaneous	0.46	0.34	0.24	-
Total direct expenses per acre	80.79	91.76	72.38	76.24
Return over direct exp per acre	44.52	-12.39	20.83	100.63
<b>Overhead Expenses</b>				
Hired labor	2.23	3.67	-	1.47
Machinery leases	0.86	0.12	0.63	0.44
Farm insurance	2.09	1.69	1.51	2.20
Utilities	1.39	2.10	0.54	1.81
Interest	3.54	2.67	3.82	1.47
Mach & bldg depreciation	6.03	8.20	0.46	13.36
Miscellaneous	2.31	2.56	3.08	2.83
Total overhead expenses per acre	18.44	21.01	10.04	23.58
Total dir & ovhd expenses per acre	99.23	112.77	82.42	99.82
Net return per acre	26.08	-33.40	10.80	77.05
Government payments	7.51	7.14	5.35	10.06
Net return with govt pmts	33.59	-26.25	16.14	87.11
Labor & management charge	8.21	5.94	6.18	14.90
Net return over lbr & mgt	25.38	-32.19	9.97	72.21

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education**  
**Region 4 - Western Missouri Slope, 2011**  
**(Farms Sorted By Net Return)**

**Sunflowers on Owned Land**

	<u>Avg. Of All Farms</u>
Number of fields	14
Number of farms	10
Acres	192.81
Yield per acre (cwt.)	16.32
Operators share of yield %	100.00
Value per cwt.	27.13
Total product return per acre	442.77
Crop insurance per acre	10.78
Other crop income per acre	0.40
Gross return per acre	453.95
<b>Direct Expenses</b>	
Seed	34.44
Fertilizer	54.52
Crop chemicals	38.64
Crop insurance	21.68
Fuel & oil	18.23
Repairs	23.45
Custom hire	16.99
Operating interest	4.06
Miscellaneous	0.46
Total direct expenses per acre	212.45
Return over direct exp per acre	241.49
<b>Overhead Expenses</b>	
Hired labor	8.02
Machinery leases	1.48
RE & pers. property taxes	3.17
Farm insurance	2.57
Utilities	2.08
Interest	14.99
Mach & bldg depreciation	16.42
Miscellaneous	4.77
Total overhead expenses per acre	53.50
Total dir & ovhd expenses per acre	265.95
Net return per acre	187.99
Government payments	5.99
Net return with govt pmts	193.98
Labor & management charge	19.29
Net return over lbr & mgt	174.69
<b>Cost of Production</b>	
Total direct expense per cwt.	13.02
Total dir & ovhd exp per cwt.	16.29
Less govt & other income	15.24
With labor & management	16.42
Net value per unit	27.13
Machinery cost per acre	77.69
Est. labor hours per acre	1.18

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education**  
**Region 4 - Western Missouri Slope, 2011**  
**(Farms Sorted By Net Return)**

**Sunflowers on Cash Rent**

	<b>Avg. Of All Farms</b>
Number of fields	28
Number of farms	19
Acres	310.99
Yield per acre (cwt.)	12.47
Operators share of yield %	100.00
Value per cwt.	26.64
Total product return per acre	332.05
Crop insurance per acre	16.00
Other crop income per acre	0.15
Gross return per acre	348.19
<b>Direct Expenses</b>	
Seed	34.75
Fertilizer	40.08
Crop chemicals	46.00
Crop insurance	20.15
Fuel & oil	15.81
Repairs	16.53
Custom hire	14.22
Land rent	31.65
Operating interest	5.14
Miscellaneous	0.53
Total direct expenses per acre	224.86
Return over direct exp per acre	123.34
<b>Overhead Expenses</b>	
Hired labor	6.67
Machinery leases	2.58
Farm insurance	1.69
Utilities	1.60
Interest	3.79
Mach & bldg depreciation	14.36
Miscellaneous	3.66
Total overhead expenses per acre	34.34
Total dir & ovhd expenses per acre	259.20
Net return per acre	89.00
Government payments	6.17
Net return with govt pmts	95.17
Labor & management charge	19.56
Net return over lbr & mgt	75.60
<b>Cost of Production</b>	
Total direct expense per cwt.	18.04
Total dir & ovhd exp per cwt.	20.79
Less govt & other income	19.00
With labor & management	20.57
Net value per unit	26.64
Machinery cost per acre	66.20
Est. labor hours per acre	1.15

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education**  
**Region 4 - Western Missouri Slope, 2011**  
**(Farms Sorted By Net Return)**

**Wheat, Durum on Owned Land**

	<b>Avg. Of All Farms</b>
Number of fields	11
Number of farms	6
Acres	167.74
Yield per acre (bu.)	22.18
Operators share of yield %	100.00
Value per bu.	8.91
Total product return per acre	197.66
Crop insurance per acre	19.53
Gross return per acre	217.19
<b>Direct Expenses</b>	
Seed	22.78
Fertilizer	68.20
Crop chemicals	23.54
Crop insurance	18.46
Fuel & oil	14.09
Repairs	19.11
Custom hire	4.10
Hired labor	5.06
Machinery leases	1.47
Operating interest	2.29
Miscellaneous	0.03
Total direct expenses per acre	179.14
Return over direct exp per acre	38.05
<b>Overhead Expenses</b>	
Hired labor	0.65
Machinery leases	0.69
RE & pers. property taxes	2.77
Farm insurance	3.80
Utilities	1.87
Dues & professional fees	0.14
Interest	16.63
Mach & bldg depreciation	14.57
Miscellaneous	5.98
Total overhead expenses per acre	47.09
Total dir & ovhd expenses per acre	226.23
Net return per acre	-9.04
Government payments	6.08
Net return with govt pmts	-2.96
Labor & management charge	22.09
Net return over lbr & mgt	-25.05
<b>Cost of Production</b>	
Total direct expense per bu.	8.08
Total dir & ovhd exp per bu.	10.20
Less govt & other income	9.05
With labor & management	10.04
Net value per unit	8.91
Machinery cost per acre	54.95
Est. labor hours per acre	1.15

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education**  
**Region 4 - Western Missouri Slope, 2011**  
**(Farms Sorted By Net Return)**

**Wheat, Durum on Cash Rent**

	<b>Avg. Of All Farms</b>
Number of fields	14
Number of farms	9
Acres	356.16
Yield per acre (bu.)	26.20
Operators share of yield %	100.00
Value per bu.	8.21
Total product return per acre	215.05
Crop insurance per acre	28.44
Gross return per acre	243.49
<b>Direct Expenses</b>	
Seed	16.36
Fertilizer	59.69
Crop chemicals	24.07
Crop insurance	16.70
Fuel & oil	13.37
Repairs	20.05
Custom hire	8.87
Land rent	34.39
Machinery leases	0.91
Operating interest	5.79
Miscellaneous	0.46
Total direct expenses per acre	200.64
Return over direct exp per acre	42.84
<b>Overhead Expenses</b>	
Hired labor	0.72
Machinery leases	0.78
Farm insurance	2.08
Utilities	1.60
Interest	3.13
Mach & bldg depreciation	15.94
Miscellaneous	3.79
Total overhead expenses per acre	28.04
Total dir & ovhd expenses per acre	228.69
Net return per acre	14.80
Government payments	4.89
Net return with govt pmts	19.69
Labor & management charge	19.99
Net return over lbr & mgt	-0.30
<b>Cost of Production</b>	
Total direct expense per bu.	7.66
Total dir & ovhd exp per bu.	8.73
Less govt & other income	7.46
With labor & management	8.22
Net value per unit	8.21
Machinery cost per acre	61.53
Est. labor hours per acre	1.05

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education**  
**Region 4 - Western Missouri Slope, 2011**  
**(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	57	7	13	15
Number of farms	36	7	7	8
Acres	181.04	377.31	170.53	201.11
Yield per acre (bu.)	24.95	17.24	23.79	31.26
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	8.48	8.55	8.38	8.68
Other product return per acre	0.14	-	0.49	-
Total product return per acre	211.66	147.34	199.97	271.37
Crop insurance per acre	23.23	17.17	40.34	18.83
Gross return per acre	234.89	164.51	240.32	290.20
<b>Direct Expenses</b>				
Seed	16.82	17.74	20.29	14.75
Fertilizer	59.59	54.22	56.04	65.88
Crop chemicals	24.93	27.97	20.24	26.10
Crop insurance	18.65	19.66	20.86	15.36
Fuel & oil	13.17	12.93	13.70	11.70
Repairs	15.19	15.89	17.05	12.08
Custom hire	9.43	14.64	8.93	2.49
Hired labor	0.70	-	-	2.38
Machinery leases	0.27	0.86	-	0.18
Operating interest	3.08	4.77	4.24	1.71
Miscellaneous	0.24	0.02	-	0.77
Total direct expenses per acre	162.06	168.70	161.36	153.39
Return over direct exp per acre	72.83	-4.19	78.96	136.81
<b>Overhead Expenses</b>				
Custom hire	0.50	-	-	1.71
Hired labor	4.55	5.39	2.51	5.92
Machinery leases	0.88	2.17	0.52	0.19
RE & pers. property taxes	2.79	2.76	3.17	2.30
Farm insurance	2.79	2.90	2.38	3.25
Utilities	1.83	2.31	1.44	1.47
Interest	14.30	17.60	23.26	7.28
Mach & bldg depreciation	14.26	12.88	15.05	16.52
Miscellaneous	4.16	3.87	5.57	2.83
Total overhead expenses per acre	46.05	49.88	53.89	41.48
Total dir & ovhd expenses per acre	208.11	218.58	215.25	194.87
Net return per acre	26.78	-54.07	25.07	95.33
Government payments	7.21	6.12	7.16	8.69
Net return with govt pmts	33.99	-47.94	32.23	104.02
Labor & management charge	19.43	16.98	20.73	20.36
Net return over lbr & mgt	14.56	-64.92	11.50	83.66
<b>Cost of Production</b>				
Total direct expense per bu.	6.50	9.79	6.78	4.91
Total dir & ovhd exp per bu.	8.34	12.68	9.05	6.23
Less govt & other income	7.12	11.33	7.03	5.35
With labor & management	7.89	12.31	7.90	6.00
Net value per unit	8.48	8.55	8.38	8.68
Machinery cost per acre	55.60	62.66	57.26	45.72
Est. labor hours per acre	1.08	1.14	1.14	0.95

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education**  
**Region 4 - Western Missouri Slope, 2011**  
**(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	74	10	24	12
Number of farms	42	8	9	9
Acres	352.45	421.53	422.24	253.67
Yield per acre (bu.)	24.23	18.51	23.84	31.52
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	8.51	8.56	8.63	8.51
Other product return per acre	0.24	0.86	0.12	0.32
Total product return per acre	206.55	159.31	205.85	268.68
Crop insurance per acre	25.15	17.31	27.71	58.41
Other crop income per acre	0.15	-	-	-
Gross return per acre	231.86	176.62	233.56	327.10
<b>Direct Expenses</b>				
Seed	16.82	15.96	17.23	16.29
Fertilizer	61.63	55.38	65.31	66.49
Crop chemicals	27.67	29.37	26.01	25.10
Crop insurance	18.37	19.09	22.33	14.06
Fuel & oil	13.53	13.55	13.17	14.12
Repairs	17.34	21.11	16.16	15.21
Custom hire	10.12	18.51	5.74	9.48
Hired labor	0.26	-	-	2.20
Land rent	32.21	35.51	32.17	32.53
Machinery leases	0.20	0.93	-	0.43
Operating interest	3.89	4.38	3.31	1.72
Miscellaneous	0.80	-	-	1.11
Total direct expenses per acre	202.82	213.79	201.43	198.74
Return over direct exp per acre	29.04	-37.17	32.13	128.35
<b>Overhead Expenses</b>				
Custom hire	0.37	-	0.96	-
Hired labor	6.55	11.79	8.57	0.80
Machinery leases	1.34	1.28	0.87	0.79
Farm insurance	2.25	1.37	2.25	2.75
Utilities	1.63	1.93	1.13	2.42
Interest	3.26	4.40	2.46	4.26
Mach & bldg depreciation	13.23	10.15	11.77	27.99
Miscellaneous	2.89	2.31	1.79	3.31
Total overhead expenses per acre	31.52	33.24	29.81	42.32
Total dir & ovhd expenses per acre	234.33	247.03	231.24	241.06
Net return per acre	-2.48	-70.40	2.32	86.04
Government payments	6.95	6.21	7.32	8.97
Net return with govt pmts	4.47	-64.19	9.64	95.00
Labor & management charge	19.68	16.24	17.97	32.06
Net return over lbr & mgt	-15.21	-80.43	-8.33	62.94
<b>Cost of Production</b>				
Total direct expense per bu.	8.37	11.55	8.45	6.30
Total dir & ovhd exp per bu.	9.67	13.35	9.70	7.65
Less govt & other income	8.33	12.03	8.22	5.50
With labor & management	9.14	12.91	8.98	6.52
Net value per unit	8.51	8.56	8.63	8.51
Machinery cost per acre	58.21	68.81	49.96	69.18
Est. labor hours per acre	1.13	1.40	0.99	1.26



**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education**  
**Region 4 - Western Missouri Slope, 2011**  
**(Farms Sorted By Net Return)**

**Wheat, Spring on Share Rent**

	<u>Avg. Of All Farms</u>
Number of fields	9
Number of farms	6
Acres	288.88
Yield per acre (bu.)	25.60
Operators share of yield %	73.77
Value per bu.	8.75
Total product return per acre	165.23
Crop insurance per acre	9.91
Gross return per acre	175.15
<b>Direct Expenses</b>	
Seed	13.81
Fertilizer	65.23
Crop chemicals	24.19
Crop insurance	14.32
Drying expense	0.84
Fuel & oil	10.10
Repairs	10.22
Custom hire	0.76
Hired labor	1.43
Operating interest	2.35
Total direct expenses per acre	143.28
Return over direct exp per acre	31.86
<b>Overhead Expenses</b>	
Custom hire	1.83
Hired labor	6.56
Farm insurance	3.07
Utilities	1.15
Dues & professional fees	0.37
Interest	2.54
Mach & bldg depreciation	18.26
Miscellaneous	2.86
Total overhead expenses per acre	36.63
Total dir & ovhd expenses per acre	179.92
Net return per acre	-4.77
Government payments	6.80
Net return with govt pmts	2.03
Labor & management charge	18.31
Net return over lbr & mgt	-16.28
<b>Cost of Production</b>	
Total direct expense per bu.	7.59
Total dir & ovhd exp per bu.	9.53
Less govt & other income	8.64
With labor & management	9.61
Net value per unit	8.75
Machinery cost per acre	41.18
Est. labor hours per acre	1.00

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

**Wheat, Winter on Cash Rent**

	<b>Avg. Of All Farms</b>
Number of fields	7
Number of farms	7
Acres	270.74
Yield per acre (bu.)	37.24
Operators share of yield %	100.00
Value per bu.	7.18
Total product return per acre	267.42
Gross return per acre	267.42
<b>Direct Expenses</b>	
Seed	15.41
Fertilizer	63.95
Crop chemicals	27.25
Crop insurance	20.01
Fuel & oil	14.19
Repairs	23.34
Custom hire	14.11
Land rent	32.09
Machinery leases	0.65
Operating interest	7.25
Miscellaneous	0.26
Total direct expenses per acre	218.52
Return over direct exp per acre	48.91
<b>Overhead Expenses</b>	
Hired labor	10.29
Machinery leases	2.16
Building leases	0.14
Farm insurance	2.73
Utilities	1.83
Interest	3.50
Mach & bldg depreciation	14.92
Miscellaneous	2.75
Total overhead expenses per acre	38.32
Total dir & ovhd expenses per acre	256.83
Net return per acre	10.59
Government payments	6.73
Net return with govt pmts	17.33
Labor & management charge	19.27
Net return over lbr & mgt	-1.94
<b>Cost of Production</b>	
Total direct expense per bu.	5.87
Total dir & ovhd exp per bu.	6.90
Less govt & other income	6.72
With labor & management	7.23
Net value per unit	7.18
Machinery cost per acre	71.25
Est. labor hours per acre	1.17

## 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**  
**Region 4 - Western Missouri Slope, 2011**  
**(Farms Sorted By Net Return Per Unit)**

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

	<b>Avg. Of All Farms</b>		<b>Low 20%</b>		<b>40 - 60%</b>		<b>High 20%</b>	
	42		8		9		9	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms								
Beef Calves sold (lb)	32.63	50.30	30.50	45.24	37.90	61.14	20.61	31.60
Transferred out (lb)	67.36	101.20	69.50	105.93	62.14	93.30	79.37	115.67
Cull sales		28.88		32.78		33.51		25.16
Other income		0.93		0.57		0.17		2.49
Purchased		-35.32		-30.82		-40.08		-18.56
Transferred in		-29.70		-31.97		-46.39		-14.14
Inventory change		17.19		-10.22		31.89		8.42
Gross margin		133.48		111.51		133.53		150.64
<b>Direct Expenses</b>								
Protein Vit Minerals (lb.)	24.58	3.82	49.79	2.87	26.59	5.11	17.54	4.01
Aftermath Grazing (aum)	0.06	1.05	0.10	1.82	0.05	1.10	0.06	1.01
Corn Silage (lb.)	210.76	3.03	-	-	323.57	4.96	135.83	1.60
Hay, Alfalfa (lb.)	147.78	4.13	231.49	6.24	61.65	1.85	160.60	3.80
Hay, Grass (lb.)	1,015.05	23.44	1,417.07	32.49	964.59	22.90	903.16	20.34
Pasture (aum)	1.54	25.52	2.35	27.02	1.29	24.94	1.43	23.69
Other feed stuffs (lb)	48.76	1.81	50.01	1.44	30.99	1.29	49.12	2.33
Veterinary		4.03		5.58		4.06		2.08
Supplies		1.66		1.15		1.78		0.70
Fuel & oil		6.12		5.14		5.77		6.69
Repairs		6.09		4.72		6.32		6.55
Custom hire		1.60		0.55		2.52		0.87
Marketing		1.20		0.36		1.72		0.83
Operating interest		1.51		2.67		1.63		1.36
Total direct expenses		85.00		92.06		85.96		75.85
Return over direct expense		48.47		19.45		47.57		74.79
<b>Overhead Expenses</b>								
Hired labor		0.68		2.07		0.49		0.36
Farm insurance		1.64		1.77		1.12		2.15
Utilities		1.88		2.50		1.33		2.11
Dues & professional fees		0.53		1.20		0.42		0.44
Interest		3.03		2.68		3.78		2.52
Mach & bldg depreciation		6.68		11.96		4.37		4.45
Miscellaneous		2.48		3.52		1.68		2.66
Total overhead expenses		16.93		25.70		13.19		14.70
Total dir & ovhd expenses		101.94		117.76		99.15		90.55
Net return		31.54		-6.25		34.38		60.09
Labor & management charge		15.22		14.37		12.54		18.70
Net return over lbr & mgt		16.32		-20.62		21.84		41.40
<b>Cost of Production Per Cwt. Produced</b>								
Total direct expense per unit		85.00		92.06		85.96		75.85
Total dir & ovhd expense per unit		101.94		117.76		99.15		90.55
With other revenue adjustments		120.50		158.59		120.23		87.55
With labor and management		135.72		172.96		132.76		106.24
Est. labor hours per unit		1.03		0.95		0.78		1.30
<b>Other Information</b>								
Number of cows		165.4		169.8		271.9		136.4
Pregnancy percentage		97.5		95.6		96.5		99.9
Pregnancy loss percentage		2.7		4.1		1.7		2.6
Culling percentage		13.6		16.4		15.4		10.4
Calving percentage		94.9		91.7		94.9		97.3
Weaning percentage		86.6		79.0		87.4		92.9
Calves sold per cow		0.90		0.83		0.91		0.94
Calf death loss percent		8.7		12.4		8.1		5.2
Cow death loss percent		2.3		3.6		1.8		1.7
Average weaning weight		528		530		534		522
Lb. weaned/exposed female		457		419		467		485
Feed cost per cow		299.33		314.33		298.28		275.05
Avg wgt/ Beef Calves sold		516		546		500		509
Avg price / cwt.		154.18		148.34		161.32		153.31

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

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

	<b>Avg. Of All Farms</b>		<b>Low 20%</b>		<b>40 - 60%</b>		<b>High 20%</b>	
	42		8		9		9	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms								
Beef Calves sold (lb)	155.5	239.77	133.4	197.83	181.9	293.43	99.8	153.06
Transferred out (lb)	321.1	482.33	303.9	463.18	298.3	447.77	384.5	560.32
Cull sales		137.64		143.36		160.81		121.90
Other income		4.43		2.48		0.82		12.07
Purchased		-168.36		-134.77		-192.36		-89.89
Transferred in		-141.55		-139.80		-222.66		-68.49
Inventory change		81.93		-44.69		153.07		40.77
Gross margin		636.19		487.58		640.88		729.75
<b>Direct Expenses</b>								
Protein Vit Minerals (lb.)	117.2	18.23	217.7	12.55	127.6	24.53	85.0	19.41
Aftermath Grazing (aum)	0.3	5.03	0.5	7.96	0.2	5.27	0.3	4.91
Barley (bu.)	0.4	1.40	0.1	0.34	0.2	0.42	1.6	6.44
Corn Silage (lb.)	1,004.5	14.44	-	-	1,552.9	23.78	658.0	7.74
Hay, Alfalfa (lb.)	704.4	19.68	1,012.2	27.30	295.9	8.87	778.0	18.43
Hay, Grass (lb.)	4,838.1	111.70	6,196.4	142.08	4,629.4	109.91	4,375.1	98.55
Pasture (aum)	7.4	121.65	10.3	118.14	6.2	119.72	6.9	114.76
Other feed stuffs (lb)	232.1	7.21	218.6	5.97	148.6	5.78	236.3	4.82
Veterinary		19.20		24.42		19.51		10.07
Supplies		7.90		5.02		8.55		3.38
Fuel & oil		29.19		22.46		27.71		32.39
Repairs		29.02		20.66		30.35		31.73
Custom hire		7.62		2.41		12.11		4.20
Marketing		5.70		1.58		8.24		4.03
Operating interest		7.20		11.68		7.80		6.58
Total direct expenses		405.16		402.54		412.56		367.44
Return over direct expense		231.03		85.05		228.32		362.31
<b>Overhead Expenses</b>								
Hired labor		3.26		9.05		2.36		1.77
Farm insurance		7.83		7.72		5.39		10.41
Utilities		8.98		10.93		6.38		10.21
Dues & professional fees		2.55		5.26		2.03		2.16
Interest		14.42		11.72		18.12		12.23
Mach & bldg depreciation		31.83		52.31		20.98		21.57
Miscellaneous		11.83		15.39		8.06		12.87
Total overhead expenses		80.70		112.38		63.32		71.21
Total dir & ovhd expenses		485.86		514.91		475.87		438.65
Net return		150.32		-27.33		165.01		291.10
Labor & management charge		72.53		62.84		60.17		90.57
Net return over lbr & mgt		77.79		-90.17		104.84		200.53
<b>Cost of Production Per Cwt. Produced</b>								
Total direct expense per unit		85.00		92.06		85.96		75.85
Total dir & ovhd expense per unit		101.94		117.76		99.15		90.55
With other revenue adjustments		120.50		158.59		120.23		87.55
With labor and management		135.72		172.96		132.76		106.24
Est. labor hours per unit		4.91		4.14		3.73		6.28
<b>Other Information</b>								
Number of cows		165.4		169.8		271.9		136.4
Pregnancy percentage		97.5		95.6		96.5		99.9
Pregnancy loss percentage		2.7		4.1		1.7		2.6
Culling percentage		13.6		16.4		15.4		10.4
Calving percentage		94.9		91.7		94.9		97.3
Weaning percentage		86.6		79.0		87.4		92.9
Calves sold per cow		0.90		0.83		0.91		0.94
Calf death loss percent		8.7		12.4		8.1		5.2
Cow death loss percent		2.3		3.6		1.8		1.7
Average weaning weight		528		530		534		522
Lb. weaned/exposed female		457		419		467		485
Feed cost per cow		299.33		314.33		298.28		275.05
Avg wgt/ Beef Calves sold		516		546		500		509
Avg price / cwt.		154.18		148.34		161.32		153.31

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

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

	<u>Avg. Of All Farms</u>	
Number of farms		9
	Quantity	Value
Beef Calves sold (lb)	113.54	146.02
Cull sales		38.14
Other income		11.77
Purchased		-23.40
Inventory change		13.38
Gross margin		185.91
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	240.26	11.78
Complete Ration (lb.)	34.69	3.51
Barley (bu.)	2.78	10.84
Corn (bu.)	0.64	3.36
Corn Silage (lb.)	1,396.44	15.27
Hay, Grass (lb.)	977.16	23.99
Pasture (aum)	1.22	21.91
Veterinary		5.45
Supplies		4.46
Fuel & oil		9.78
Repairs		16.08
Custom hire		1.80
Marketing		0.19
Operating interest		2.58
Total direct expenses		131.01
Return over direct expense		54.90
<b>Overhead Expenses</b>		
Hired labor		8.69
Farm insurance		0.94
Utilities		3.04
Interest		5.44
Mach & bldg depreciation		5.18
Miscellaneous		0.92
Total overhead expenses		24.20
Total dir & ovhd expenses		155.21
Net return		30.70
Labor & management charge		13.83
Net return over lbr & mgt		16.86
<b>Cost of Production Per Cwt. Produced</b>		
Total direct expense per unit		131.01
Total dir & ovhd expense per unit		155.21
With other revenue adjustments		123.84
With labor and management		137.67
Est. labor hours per unit		1.10
<b>Other Information</b>		
Number of cows		255.2
Pregnancy percentage		98.9
Pregnancy loss percentage		2.2
Culling percentage		17.5
Calving percentage		96.8
Weaning percentage		88.8
Calves sold per cow		0.75
Calf death loss percent		8.7
Cow death loss percent		2.0
Average weaning weight		565
Lb. weaned/exposed female		502
Feed cost per cow		455.03
Avg wgt/ Beef Calves sold		756
Avg price / cwt.		128.60

**Livestock Enterprise Analysis**  
**North Dakota Farm Business Management Education**  
**Region 4 - Western Missouri Slope, 2011**  
**(Farms Sorted By Net Return Per Unit)**

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

	<u>Avg. Of All Farms</u>	
Number of farms	9	
	Quantity	Value
Beef Calves sold (lb)	569.9	732.90
Cull sales		191.44
Other income		59.07
Purchased		-117.47
Inventory change		67.18
Gross margin		933.12
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	1,205.9	59.13
Complete Ration (lb.)	174.1	17.62
Barley (bu.)	13.9	54.42
Corn (bu.)	3.2	16.87
Corn Silage (lb.)	7,009.1	76.62
Hay, Grass (lb.)	4,904.7	120.42
Pasture (aum)	6.1	109.95
Veterinary		27.34
Supplies		22.40
Fuel & oil		49.11
Repairs		80.74
Custom hire		9.02
Marketing		0.97
Operating interest		12.95
Total direct expenses		657.56
Return over direct expense		275.56
<b>Overhead Expenses</b>		
Hired labor		43.61
Farm insurance		4.71
Utilities		15.25
Interest		27.33
Mach & bldg depreciation		25.98
Miscellaneous		4.60
Total overhead expenses		121.48
Total dir & ovhd expenses		779.04
Net return		154.08
Labor & management charge		69.44
Net return over lbr & mgt		84.64
<b>Cost of Production Per Cwt. Produced</b>		
Total direct expense per unit		131.01
Total dir & ovhd expense per unit		155.21
With other revenue adjustments		123.84
With labor and management		137.67
Est. labor hours per unit		5.52
<b>Other Information</b>		
Number of cows		255.2
Pregnancy percentage		98.9
Pregnancy loss percentage		2.2
Culling percentage		17.5
Calving percentage		96.8
Weaning percentage		88.8
Calves sold per cow		0.75
Calf death loss percent		8.7
Cow death loss percent		2.0
Average weaning weight		565
Lb. weaned/exposed female		502
Feed cost per cow		455.03
Avg wgt/ Beef Calves sold		756
Avg price / cwt.		128.60

**Livestock Enterprise Analysis**  
**North Dakota Farm Business Management Education**  
**Region 4 - Western Missouri Slope, 2011**  
**(Farms Sorted By Net Return Per Unit)**

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

	<u>Avg. Of All Farms</u>		<u>Low20%</u>		<u>40 - 60%</u>		<u>High 20%</u>	
	28		5		5		6	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms								
Beef Replace sold (hd)	0.2	295.38	0.5	469.05	0.0	27.52	0.4	528.50
Transferred out (hd)	0.8	1,003.49	0.6	641.94	1.0	1,226.15	0.6	869.11
Cull sales (hd)	0.0	22.73	0.0	7.50	0.0	19.27	0.0	15.45
Other income		-		-		-		-
Purchased (hd)	0.1	-101.74	0.2	-169.35	-	-	0.3	-222.45
Transferred in (hd)	0.8	-587.47	0.9	-774.82	1.0	-688.30	0.5	-381.77
Inventory change (hd)	-0.1	-84.57	0.0	93.89	-	-	-0.3	-156.22
Gross margin		547.83		268.19		584.63		652.62
<b>Direct Expenses</b>								
Protein Vit Minerals (lb.)	79.9	15.06	37.5	12.85	82.6	21.10	134.6	17.90
Complete Ration (lb.)	21.2	2.12	174.2	17.42	-	-	-	-
Corn (bu.)	3.0	17.52	0.2	1.00	8.3	49.54	-	-
Corn Silage (lb.)	943.6	14.63	1,114.8	16.72	2,614.7	40.73	60.6	0.76
Hay, Alfalfa (lb.)	374.5	10.74	677.4	22.02	-	-	41.4	1.03
Hay, Grass (lb.)	2,175.4	53.33	658.6	14.07	2,651.4	65.99	1,929.3	50.88
Oats (bu.)	2.1	6.34	1.7	4.04	5.3	15.83	3.0	9.37
Pasture (aum)	5.2	78.52	3.6	76.33	4.3	94.99	4.2	60.97
DDGS (lb.)	37.7	2.44	-	-	128.4	9.63	17.4	0.96
Other feed stuffs (lb)	42.8	3.84	65.2	2.83	45.9	0.28	15.7	0.62
Breeding fees		4.08		18.72		10.55		-
Veterinary		13.41		9.60		17.61		15.23
Supplies		3.67		0.64		5.00		6.47
Fuel & oil		9.56		11.67		7.40		10.45
Repairs		10.09		11.28		5.98		13.15
Custom hire		4.20		-		11.84		4.97
Marketing		1.81		12.90		-		-
Operating interest		2.69		1.84		2.99		1.41
Total direct expenses		254.03		233.93		359.46		194.16
Return over direct expense		293.79		34.27		225.17		458.46
<b>Overhead Expenses</b>								
Farm insurance		2.51		2.91		1.51		2.02
Utilities		3.16		3.68		2.66		2.59
Interest		4.59		3.93		8.67		1.97
Mach & bldg depreciation		10.85		6.15		8.50		5.43
Miscellaneous		7.23		6.55		3.20		5.85
Total overhead expenses		28.34		23.21		24.55		17.87
Total dir & ovhd expenses		282.37		257.14		384.01		212.02
Net return		265.46		11.06		200.63		440.59
Labor & management charge		23.13		28.90		19.16		20.66
Net return over lbr & mgt		242.32		-17.84		181.47		419.93
Est. labor hours per unit		1.63		1.87		1.13		1.53
<b>Other Information</b>								
No. purchased or trans in		40		34		44		48
Number sold or trans out		46		32		44		64
Average number of head		38		22		44		56
Percentage death loss		0.5		1.3		-		0.5
Feed cost per average head		244.61		238.37		296.73		161.51



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

	<u>Avg. Of</u>	
	<u>All Farms</u>	
Number of farms	20	
	Quantity	Value
Backgnd Beef sold (lb)	319.29	393.97
Transferred out (lb)	204.18	266.78
Other income		2.09
Purchased (lb)	-49.23	-70.44
Transferred in (lb)	-306.86	-449.45
Inventory change (lb)	-69.36	-17.27
Gross margin		125.68
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	19.15	4.66
Creep / Starter (lb.)	19.83	2.03
Barley (bu.)	3.26	13.86
Corn (bu.)	0.66	3.64
Corn Silage (lb.)	335.24	4.45
Hay, Alfalfa (lb.)	406.53	12.17
Hay, Grass (lb.)	912.89	21.10
Oats (bu.)	2.20	6.96
Pasture (aum)	0.24	4.20
Peas, Field (lb.)	0.14	0.62
DDGS (lb.)	39.15	2.10
Other feed stuffs (lb)	38.91	1.15
Veterinary		2.32
Supplies		0.87
Fuel & oil		3.82
Repairs		3.52
Custom hire		1.69
Marketing		3.45
Operating interest		1.47
Total direct expenses		94.07
Return over direct expense		31.61
<b>Overhead Expenses</b>		
Farm insurance		1.48
Interest		2.01
Mach & bldg depreciation		6.15
Miscellaneous		5.34
Total overhead expenses		14.98
Total dir & ovhd expenses		109.04
Net return		16.64
Labor & management charge		11.96
Net return over lbr & mgt		4.68
<b>Cost of Production Per Cwt. Produced</b>		
Total direct expense per unit		120.18
Total dir & ovhd expense per unit		123.04
With other revenue adjustments		123.04
With labor and management		125.33
Est. labor hours per unit		0.79
<b>Other Information</b>		
No. purchased or trans in		128
Number sold or trans out		149
Percentage death loss		1.0
Avg. daily gain (lb.)		0.94
Lb. of conc / lb. of gain		3.78
Lb. of feed / lb. of gain		18.21
Feed cost per cwt. of gain		76.93
Feed cost per head		115.11
Avg wgt / Backgnd Beef sold		689
Avg sales price / cwt.		123.39

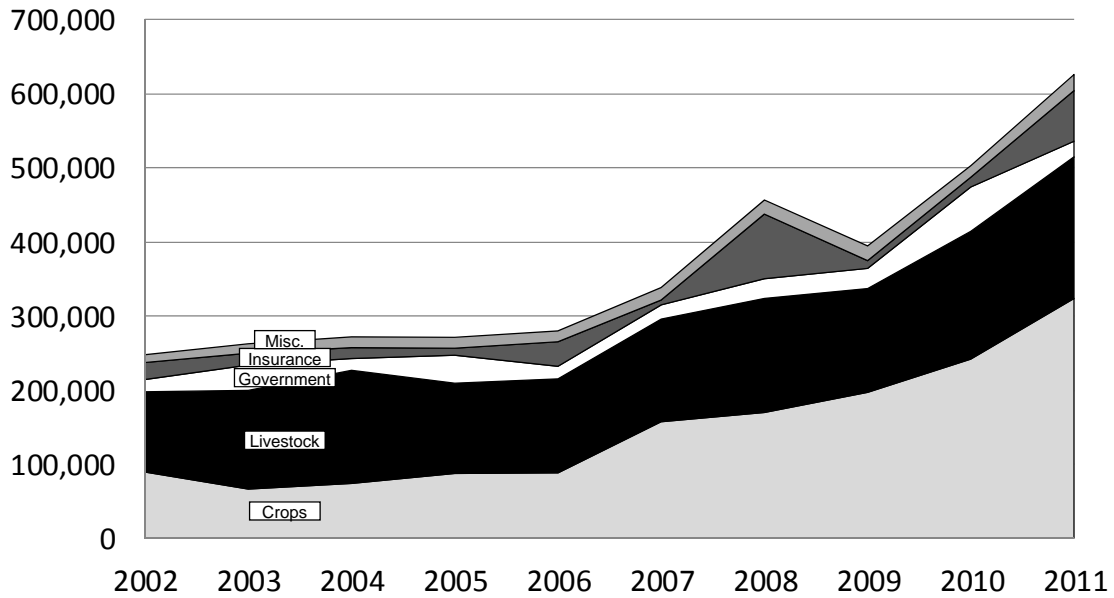
**Livestock Enterprise Analysis**  
**North Dakota Farm Business Management Education**  
**Region 4 - Western Missouri Slope, 2011**  
**(Farms Sorted By Net Return Per Unit)**

**Beef Backgrounding -- Average Per Head**

	<u>Avg. Of All Farms</u>	
Number of farms		20
	Quantity	Value
Backgnd Beef sold (lb)	477.8	589.49
Transferred out (lb)	305.5	399.18
Other income		3.13
Purchased (lb)	-73.7	-105.39
Transferred in (lb)	-459.2	-672.50
Inventory change (lb)	-103.8	-25.84
Gross margin		188.05
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	28.7	6.97
Creep / Starter (lb.)	29.7	3.04
Barley (bu.)	4.9	20.74
Corn (bu.)	1.0	5.45
Corn Silage (lb.)	501.6	6.66
Hay, Alfalfa (lb.)	608.3	18.21
Hay, Grass (lb.)	1,365.9	31.58
Oats (bu.)	3.3	10.41
Pasture (aum)	0.4	6.28
Peas, Field (lb.)	0.2	0.92
DDGS (lb.)	58.6	3.14
Other feed stuffs (lb)	58.2	1.71
Veterinary		3.46
Supplies		3.51
Fuel & oil		5.71
Repairs		5.27
Custom hire		2.53
Marketing		5.16
Total direct expenses		140.75
Return over direct expense		47.30
<b>Overhead Expenses</b>		
Farm insurance		2.21
Utilities		2.18
Interest		3.01
Mach & bldg depreciation		9.20
Miscellaneous		5.81
Total overhead expenses		22.41
Total dir & ovhd expenses		163.16
Net return		24.89
Labor & management charge		17.89
Net return over lbr & mgt		7.00
<b>Cost of Production Per Cwt. Produced</b>		
Total direct expense per unit		120.18
Total dir & ovhd expense per unit		123.04
With other revenue adjustments		123.04
With labor and management		125.33
Est. labor hours per unit		1.18
<b>Other Information</b>		
No. purchased or trans in		128
Number sold or trans out		149
Percentage death loss		1.0
Avg. daily gain (lb.)		0.94
Lb. of conc / lb. of gain		3.78
Lb. of feed / lb. of gain		18.21
Feed cost per cwt. of gain		76.93
Feed cost per head		115.11
Average purchase weight		558
Avg purch price / cwt.		143.08

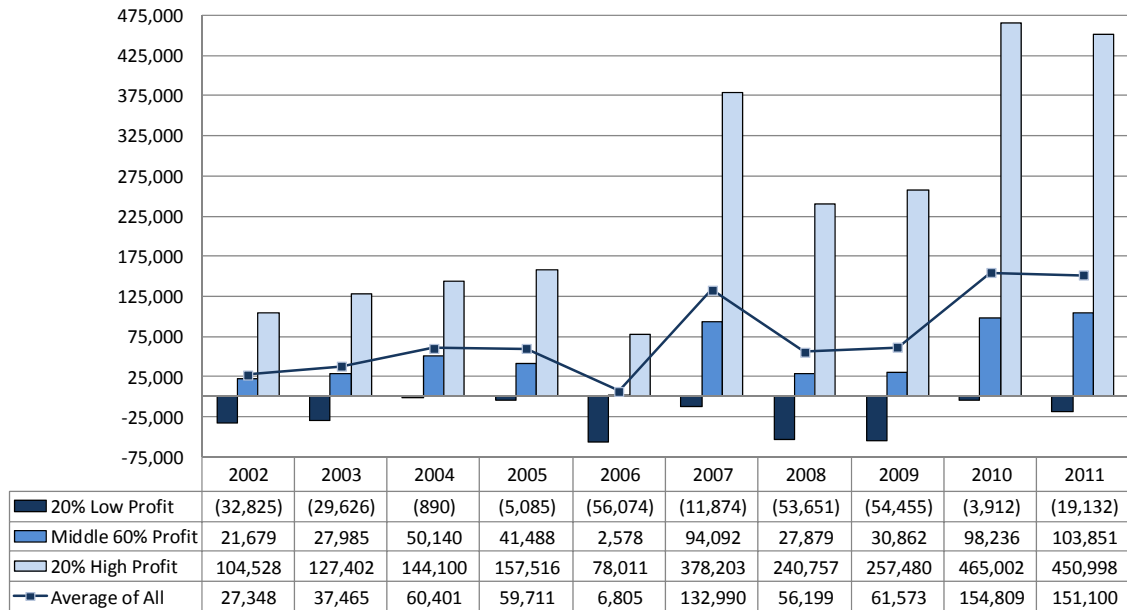
# Figure 1. Gross Cash Income Per Farm

N.D. Farm Business Management Education Program – West Region



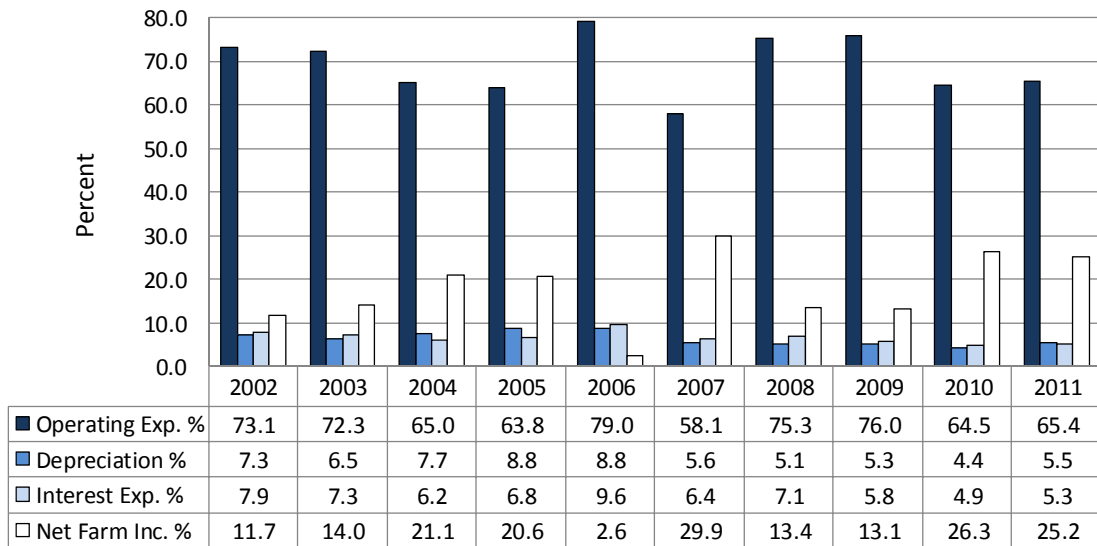
# Figure 2. Net Farm Income (Accrual) Per Farm

N.D. Farm Business Management Education Program – West Region



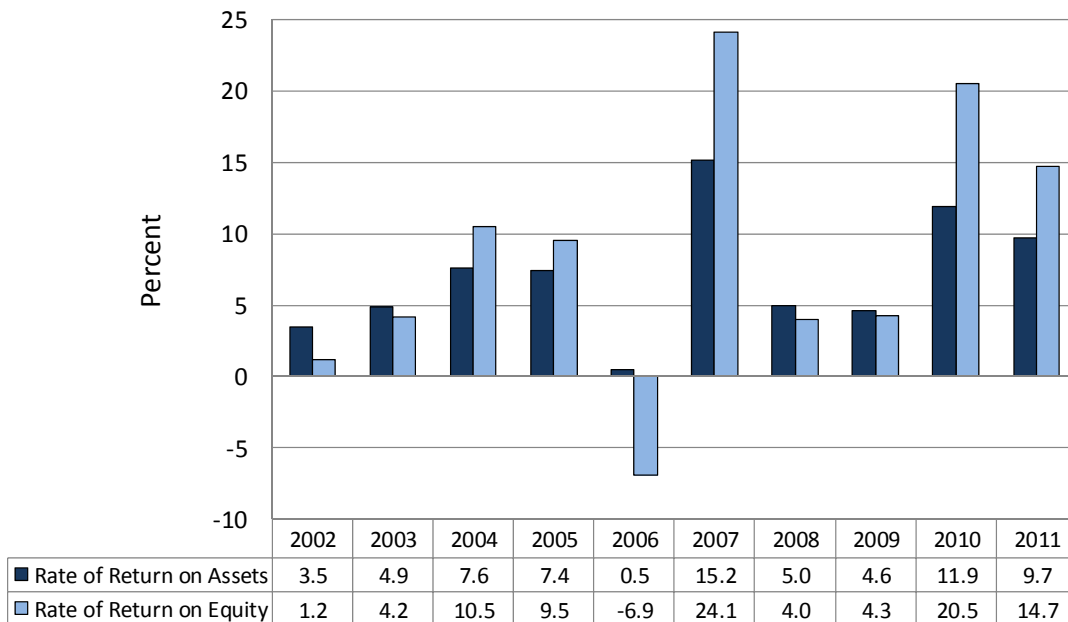
### Figure 3. Financial Efficiency Measures (As Percent of Gross Revenue)

N.D. Farm Business Management Education Program – West Region

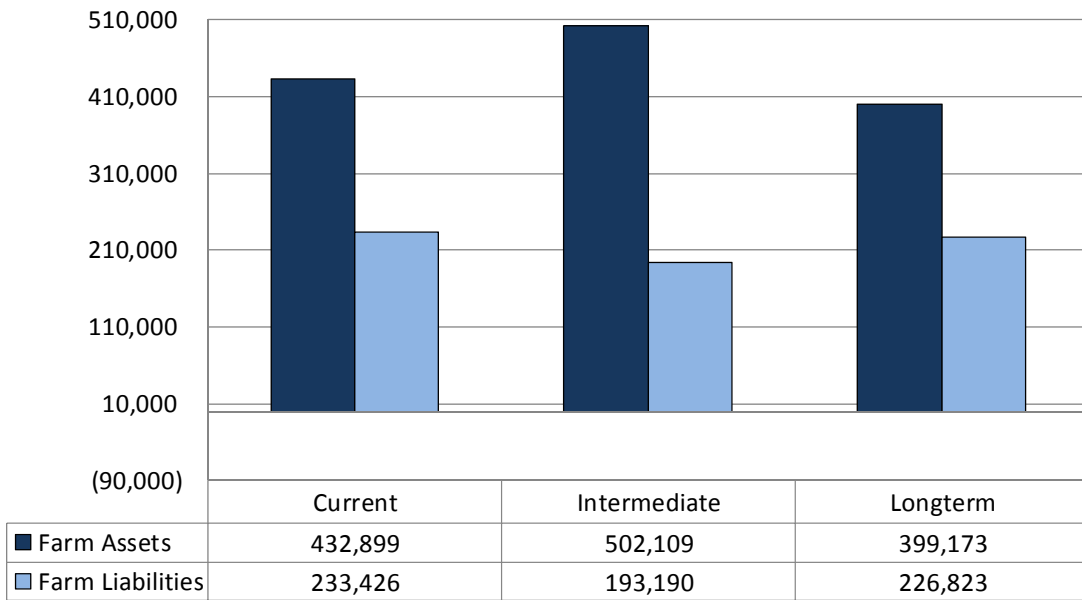


### Figure 4. Profitability Measures Per Farm

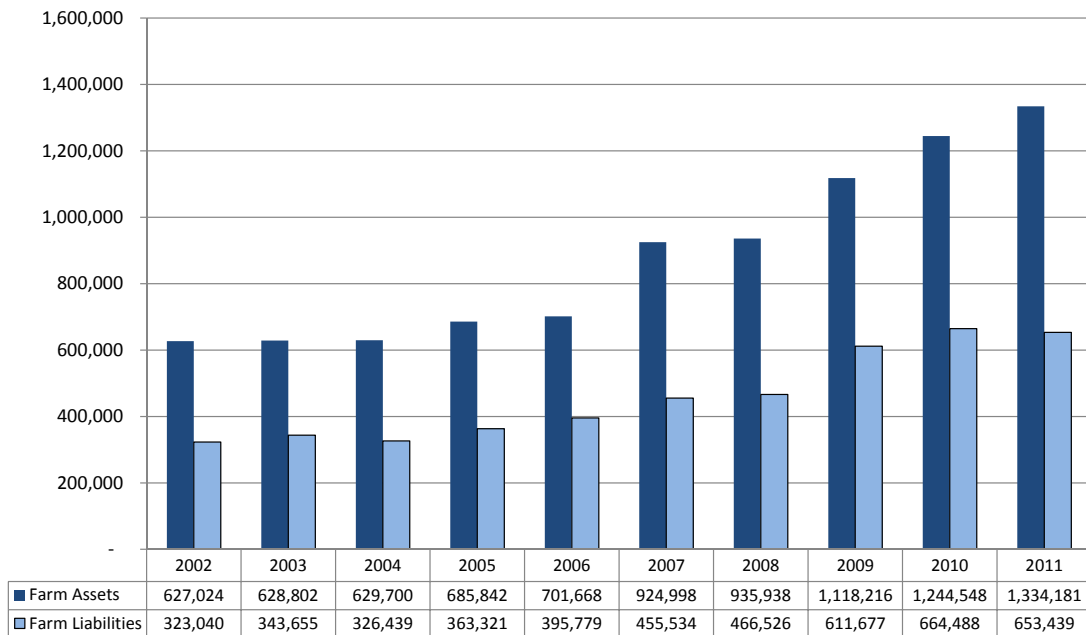
N.D. Farm Business Management Education Program – West Region



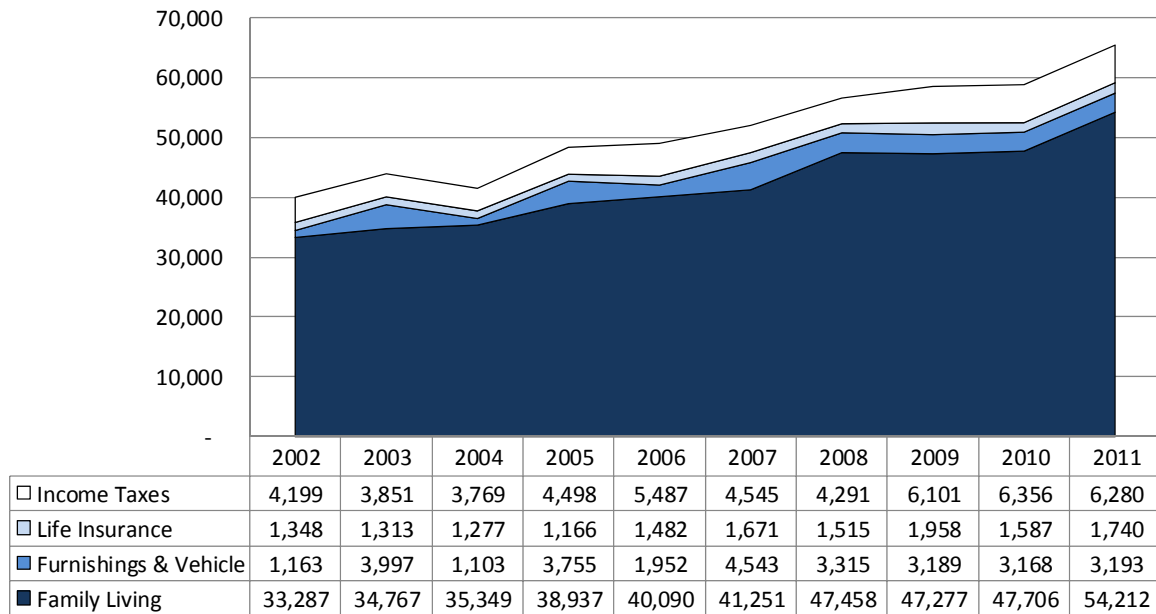
**Figure 5. Assets and Liabilities Per Farm, 2011**  
 N.D. Farm Business Management Education Program – West Region



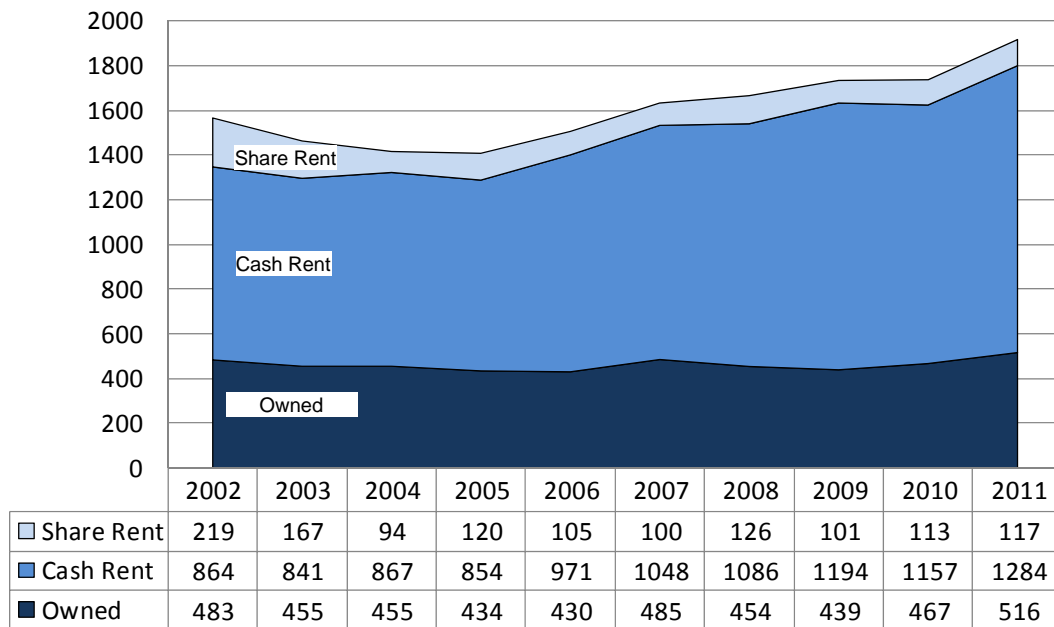
**Figure 6. Total Farm Assets and Liabilities**  
 N.D. Farm Business Management Education Program  
 Western Missouri Slope Region



**Figure 7. Household and Personal Expenses**  
 N.D. Farm Business Management Education Program – West Region

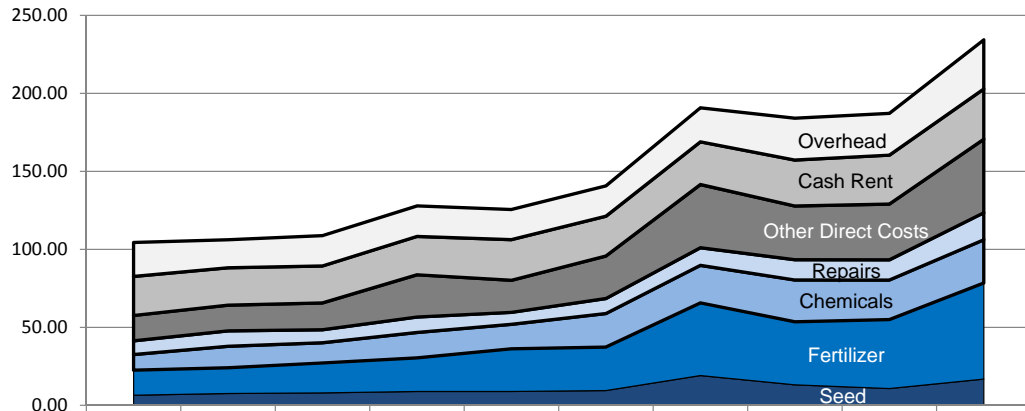


**Figure 8. Crop Acreage Per Farm**  
 N.D. Farm Business Management Education Program – West Region



### Figure 9. Spring Wheat Costs Per Acre

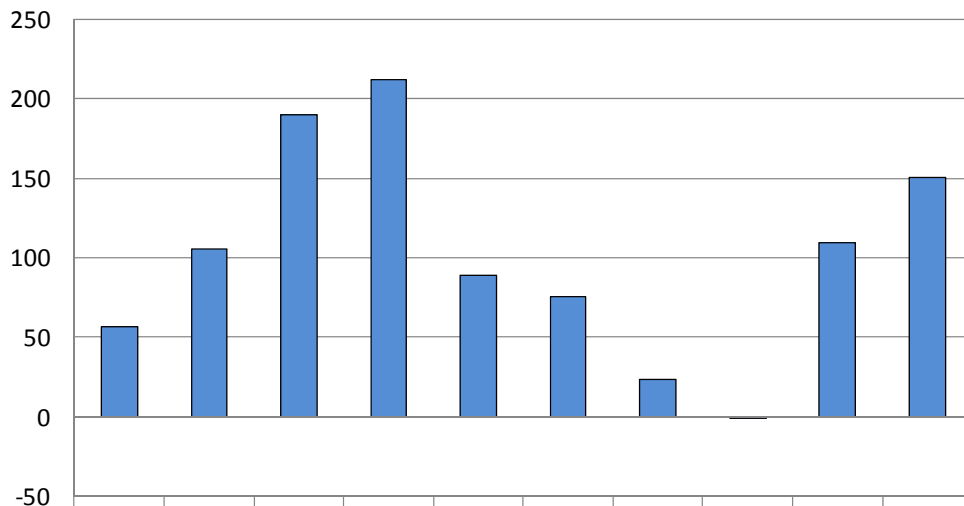
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	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Overhead	21.76	17.94	19.47	19.54	19.32	19.45	21.81	26.85	26.76	31.52
Cash Rent	25.04	23.95	23.69	24.60	26.06	25.54	27.37	29.47	31.36	32.21
Other Direct Costs	16.27	16.52	17.23	27.08	20.57	27.23	40.51	34.40	35.77	47.15
Repairs	8.74	9.88	8.32	9.94	7.67	9.61	11.32	13.02	12.94	17.34
Chemicals	10.06	13.74	12.95	16.27	15.69	21.50	24.05	26.80	25.34	27.67
Fertilizer	16.05	16.52	19.22	21.55	27.34	27.91	46.63	40.42	44.22	61.63
Seed	6.47	7.58	7.94	8.86	8.90	9.46	19.06	13.13	10.77	16.82

### Figure 10. Average Net Return Per Beef Cow

N.D. Farm Business Management Education Program – West Region



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Avg. Net Return	56.87	105.49	190.46	211.94	89.16	75.63	23.58	-0.05	109.34	150.32



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