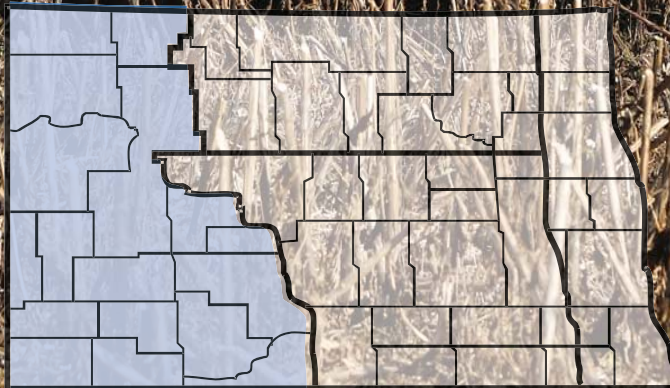


# 2014 ANNUAL REPORT

## Western North Dakota

North Dakota Farm and Ranch Business  
Management Education



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







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# NORTH DAKOTA FARM BUSINESS MANAGEMENT EDUCATION

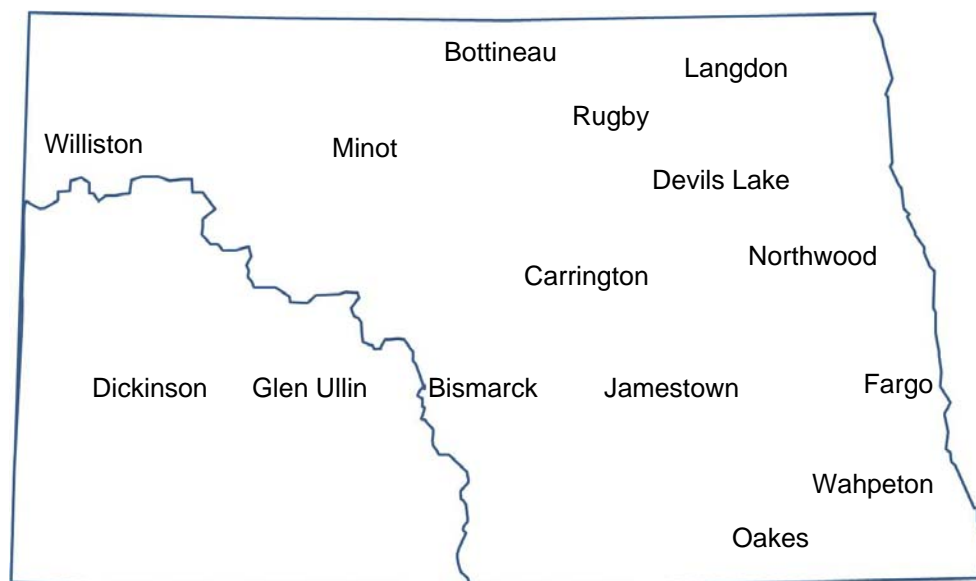
## REGION 4 – WESTERN NORTH DAKOTA 2014 ANNUAL REPORT

The Western North Dakota (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 .....	Lynsey Frey
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 2014 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



# 2014 Western North Dakota Report

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## INTRODUCTION

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

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

The 2014 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 26th 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 – North Central, 3 – South Central and 4 - Western identified on the North Dakota map. Farms in Region 1 – Red River Valley are located within the Red River Valley. Those farms are contained in a combined Minnesota-North Dakota Red River Valley report. The state averages report includes all farms participating in the North Dakota Farm Business Management Education Program that were represented in the regional averages and also those farms which were processed and submitted after the March deadline date. All of these reports may be ordered from Farm Business Management, P.O. Box 6022, Bismarck, ND, 58506-6022 for \$5 per copy. The reports are available online at [www.ndfarmmanagement.com](http://www.ndfarmmanagement.com).

## **EXPLANATORY NOTES FOR THE FARM OPERATORS' REPORTS**

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

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

### **Farm Income Statement**

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

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

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

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

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

### **Inventory Changes**

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



## Depreciation

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

## Profitability Measures

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

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

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

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

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

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

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

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

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

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

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

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

## Liquidity & Repayment Capacity Measures

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

## Balance Sheets

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

## Statement of Cash Flows

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

## Financial Standards Measures

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

### Liquidity

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

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

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

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

### Solvency

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

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

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

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

### Profitability

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

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

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

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

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

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

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

#### **Repayment Capacity**

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

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

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

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

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

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

#### **Efficiency**

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

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

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

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

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

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

## **Crop Production and Marketing Summary**

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

## **Household and Personal Expenses**

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

## **Operator and Labor Information**

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

## **Nonfarm Summary**

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

**Farm Income Statement**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(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	76	15	15	16
<b>Cash Farm Income</b>				
Barley	2,152	3,346	-	318
Beans, Garbonzo	640	-	-	-
Beans, Pinto	6,989	-	-	33,197
Buckwheat	2,057	10,423	-	-
Canola	2,655	-	5,048	-
Corn	52,631	69,645	40,874	93,413
Corn Silage	1,276	6,153	310	-
Corn, Ear	331	-	-	1,572
Flax	6,465	2,808	7,226	19,292
Hay, Alfalfa	2,022	1,951	133	7,650
Hay, Mixed	110	-	-	-
Hay, Mixed Alfalfa/Grass	1,197	787	902	2,139
Lentils	5,641	-	-	26,793
Oats	1,719	1,246	2,938	-
Peas, Field	4,619	3,998	-	18,193
Radishes	674	3,416	-	-
Rye	1,441	-	-	6,843
Safflower	1,670	-	-	7,931
Soybeans	13,890	6,712	10,139	22,104
Straw	109	-	19	290
Sunflowers	36,757	76,161	26,453	18,361
Sunflowers, Confectionary	99	-	501	-
Wheat, Durum	17,169	26,425	7,864	28,329
Wheat, Spring	150,837	272,235	101,961	232,729
Wheat, Winter	11,907	4,679	13,743	14,004
Beef Bulls	5,831	-	24,280	4,755
Beef Cow-Calf, Beef Calves	47,426	24,420	50,374	70,478
Beef Replacement Heifers	9,450	-	36,647	6,589
Beef Backgrounding	87,725	131,067	35,538	143,174
Beef Finishing	381	103	1,718	-
Beef Finish Yearlings	6,878	-	-	31,081
Beef Grazing	1,282	-	-	5,745
Dairy, Milk	61,134	-	-	12,335
Dairy, Dairy Calves	788	-	-	-
Dairy Backgrounding	1,121	-	-	-
Cull breeding livestock	44,080	50,400	22,863	67,295
Misc. livestock income	3,216	32	387	9,442
Crop government payments	1,774	-	-	8,425
Other government payments	10,729	8,473	4,584	29,407
Custom work income	7,629	14,482	11,466	1,656
Patronage dividends, cash	4,281	5,280	1,713	7,933
Crop insurance income	13,334	18,834	12,052	21,110
Property insurance income	2,575	1,903	1,087	6,691
Other farm income	8,373	12,865	5,565	14,975
Gross Cash Farm Income	643,063	757,844	426,386	974,249



**Farm Income Statement (continued)**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(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	76	15	15	16
<b>Cash Farm Expense</b>				
Seed	36,070	56,370	25,879	52,881
Fertilizer	75,202	120,834	55,188	106,796
Crop chemicals	50,946	70,274	28,245	90,224
Crop insurance	21,153	33,765	10,918	30,288
Storage	601	560	532	-
Irrigation energy	633	-	480	2,334
Crop marketing	1,354	6,143	204	340
Crop miscellaneous	744	2,053	-	627
Feeder livestock purchase	29,186	32,521	35,107	66,460
Purchased feed	34,048	14,319	14,779	23,460
Breeding fees	534	-	369	996
Veterinary	7,961	4,699	4,854	8,877
Supplies	1,864	480	1,402	2,643
Livestock insurance	55	-	-	263
Livestock leases	728	-	1,173	172
Grazing fees	467	-	-	204
Livestock marketing	3,307	819	3,659	2,916
Interest	35,796	49,728	25,052	44,128
Fuel & oil	35,401	45,675	25,269	40,584
Repairs	44,081	67,769	24,113	52,043
Custom hire	31,575	45,281	21,081	42,746
Hired labor	25,112	35,858	2,598	33,658
Land rent	67,865	94,874	48,622	100,899
Machinery leases	6,649	8,152	438	17,133
Building leases	214	775	-	179
Real estate taxes	2,306	2,621	1,701	3,459
Farm insurance	9,360	11,479	7,266	12,897
Utilities	9,426	9,914	4,760	11,448
Dues & professional fees	1,815	2,700	1,177	2,942
Miscellaneous	11,248	12,140	8,027	13,157
Total cash expense	545,700	729,802	352,891	764,751
Net cash farm income	97,363	28,042	73,495	209,497
<b>Inventory Changes</b>				
Prepays and supplies	-9,837	-30,907	-14,532	22,602
Accounts receivable	7,620	-28,054	-941	38,428
Hedging accounts	-7,840	141	-119	-3,986
Other current assets	3,297	6,367	-649	-2,291
Crops and feed	29,999	9,982	15,033	58,975
Market livestock	35,960	-31,697	40,844	106,159
Breeding livestock	-6,414	-12,815	12,190	-26,259
Other assets	1,399	-877	1,372	2,536
Accounts payable	-1,546	3,682	-11,663	12,667
Accrued interest	-1,034	-9,076	-1,235	2,063
Total inventory change	51,604	-93,253	40,298	210,896
Net operating profit	148,967	-65,211	113,793	420,393
<b>Depreciation</b>				
Machinery and equipment	-36,070	-39,669	-26,844	-66,116
Titled vehicles	-6,767	-8,037	-7,446	-9,595
Buildings and improvements	-6,132	-6,798	-2,638	-8,745
Total depreciation	-48,970	-54,504	-36,929	-84,455
Net farm income from operations	99,997	-119,715	76,864	335,938
Gain or loss on capital sales	158	530	-	36
Net farm income	100,155	-119,185	76,864	335,974

**Inventory Changes**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(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	76	15	15	16
Net cash farm income	97,363	28,042	73,495	209,497
<b>Crops and Feed</b>				
Ending inventory	358,356	534,849	182,996	567,754
Beginning inventory	328,357	524,867	167,963	508,779
Inventory change	29,999	9,982	15,033	58,975
<b>Market Livestock</b>				
Ending inventory	133,566	93,689	137,790	241,621
Beginning inventory	97,606	125,386	96,947	135,462
Inventory change	35,960	-31,697	40,844	106,159
<b>Accts Receivable</b>				
Ending inventory	37,644	13,519	6,214	105,108
Beginning inventory	30,024	41,573	7,155	66,680
Inventory change	7,620	-28,054	-941	38,428
<b>Prepaid Expenses and Supplies</b>				
Ending inventory	32,460	23,162	14,391	87,694
Beginning inventory	42,296	54,070	28,923	65,092
Inventory change	-9,837	-30,907	-14,532	22,602
<b>Hedging Activities</b>				
Ending inventory	395	602	600	750
Withdrawals	12	-	-	55
Beginning inventory	328	461	-	1,125
Deposits	7,918	-	719	3,666
Gain or loss	-7,840	141	-119	-3,986
<b>Other Current Assets</b>				
Ending inventory	8,903	12,126	2,700	5,119
Beginning inventory	5,606	5,759	3,349	7,410
Inventory change	3,297	6,367	-649	-2,291
<b>Breeding Livestock</b>				
Ending inventory	175,799	84,219	142,402	284,031
Capital sales	4,208	9,293	10,490	484
Beginning inventory	159,155	98,794	123,315	252,836
Capital purchases	27,266	7,533	17,387	57,937
Depreciation, capital adjust	-6,414	-12,815	12,190	-26,259
<b>Other Capital Assets</b>				
Ending inventory	29,064	26,542	26,835	40,541
Capital sales	39	-	-	188
Beginning inventory	27,567	27,318	25,160	38,012
Capital purchases	138	100	303	180
Depreciation, capital adjust	1,399	-877	1,372	2,536
<b>Accounts Payable</b>				
Beginning inventory	18,234	28,686	3,022	24,935
Ending inventory	19,780	25,003	14,685	12,267
Inventory change	-1,546	3,682	-11,663	12,667
<b>Accrued Interest</b>				
Beginning inventory	13,699	14,758	13,678	19,238
Ending inventory	14,740	23,866	14,913	17,174
Inventory change	-1,034	-9,076	-1,235	2,063
Total inventory change	51,604	-93,253	40,298	210,896
Net operating profit	148,967	-65,211	113,793	420,393

**Depreciation**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(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	76	15	15	16
Net operating profit	148,967	-65,211	113,793	420,393
<b>Machinery and Equipment</b>				
Ending inventory	464,535	682,667	330,276	774,886
Capital sales	7,872	1,687	6,260	25,004
Beginning inventory	435,533	634,156	320,741	737,860
Capital purchases	72,944	89,868	42,639	128,145
Depreciation, capital adjust.	-36,070	-39,669	-26,844	-66,116
<b>Titled Vehicles</b>				
Ending inventory	73,693	80,275	66,818	103,507
Capital sales	1,777	296	4,662	257
Beginning inventory	75,041	80,495	69,936	106,735
Capital purchases	7,196	8,113	8,991	6,623
Depreciation, capital adjust.	-6,767	-8,037	-7,446	-9,595
<b>Buildings and Improvements</b>				
Ending inventory	154,080	204,912	69,414	202,921
Capital sales	71	360	-	-
Beginning inventory	138,712	171,619	67,557	188,615
Capital purchases	21,571	40,451	4,495	23,051
Depreciation, capital adjust.	-6,132	-6,798	-2,638	-8,745
Total depreciation, capital adj.	-48,970	-54,504	-36,929	-84,455
Net farm income from operations	99,997	-119,715	76,864	335,938
Gain or loss on capital sales	158	530	-	36
Net farm income	100,155	-119,185	76,864	335,974

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**Profitability Measures**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(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	76	15	15	16
<b>Profitability (assets valued at cost)</b>				
Net farm income from operations	99,997	-119,715	76,864	335,938
Rate of return on assets	5.0 %	-5.1 %	5.1 %	11.0 %
Rate of return on equity	5.8 %	-19.8 %	7.1 %	15.3 %
Operating profit margin	13.7 %	-17.1 %	14.2 %	29.7 %
Asset turnover rate	36.2 %	30.0 %	35.9 %	37.1 %
Farm interest expense	36,830	58,803	26,287	42,064
Value of operator lbr and mgmt.	48,271	49,721	39,870	63,653
Return on farm assets	88,556	-110,633	63,281	314,349
Average farm assets	1,778,265	2,162,616	1,239,301	2,855,087
Return on farm equity	51,726	-169,437	36,994	272,285
Average farm equity	894,047	857,096	524,090	1,773,972
Value of farm production	644,491	647,706	444,877	1,060,120

**Liquidity & Repayment Capacity Measures**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(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	76	15	15	16
<b>Liquidity</b>				
Current ratio	1.58	1.06	1.45	2.12
Working capital	217,117	43,189	115,645	552,997
Working capital to gross inc	32.4 %	5.9 %	23.4 %	47.2 %
Current assets	588,839	740,881	374,989	1,047,220
Current liabilities	371,722	697,692	259,344	494,223
Gross revenues (accrual)	670,190	733,975	494,763	1,172,234
<b>Repayment capacity</b>				
Net farm income from operations	99,997	-119,715	76,864	335,938
Depreciation	48,970	54,504	36,929	84,455
Personal income	49,095	65,049	55,548	31,051
Family living/owner withdrawals	-57,613	-70,848	-52,045	-68,789
Cash discrepancy	-2,196	-2,406	157	-2,730
Payments on personal debt	-3,417	-1,851	-4,502	-2,198
Income taxes paid	-10,246	-10,095	-6,522	-15,751
Interest on term debt	24,464	33,619	18,189	29,341
Capital debt repayment capacity	151,251	-49,336	124,460	394,046
Scheduled term debt payments	-100,248	-134,924	-73,172	-150,618
Capital debt repayment margin	51,003	-184,260	51,288	243,428
Cash replacement allowance	-12,339	-12,191	-13,421	-17,153
Replacement margin	38,664	-196,451	37,867	226,276
Term debt coverage ratio	1.51	-0.37	1.70	2.62
Replacement coverage ratio	1.34	-0.34	1.44	2.35



**Balance Sheet at Cost Values**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(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	71	12	15	15
<b>Assets</b>				
Current Farm Assets				
Cash and checking balance	18,868	20,892	30,297	17,558
Prepaid expenses & supplies	33,694	26,213	14,391	92,710
Growing crops	3,655	6,467	2,700	4,607
Accounts receivable	38,262	16,899	6,214	112,115
Hedging accounts	254	752	600	-
Crops held for sale or feed	359,146	556,082	182,996	592,084
Crops under government loan	3,449	20,405	-	-
Market livestock held for sale	131,331	93,170	137,790	227,292
Other current assets	180	-	-	853
Total current farm assets	588,839	740,881	374,989	1,047,220
Intermediate Farm Assets				
Breeding livestock	161,482	80,891	142,402	273,335
Machinery and equipment	451,563	662,382	330,276	799,403
Titled vehicles	73,060	78,476	66,818	107,596
Other intermediate assets	1,962	472	963	5,447
Total intermediate farm assets	688,066	822,222	540,458	1,185,780
Long Term Farm Assets				
Farm land	336,808	351,464	283,348	635,014
Buildings and improvements	124,393	220,858	69,414	206,867
Other long-term assets	23,339	24,324	25,872	36,997
Total long-term farm assets	484,541	596,646	378,635	878,878
Total Farm Assets	1,761,446	2,159,749	1,294,082	3,111,878
Total Nonfarm Assets	205,250	218,623	186,207	345,369
Total Assets	1,966,696	2,378,372	1,480,289	3,457,247
<b>Liabilities</b>				
Current Farm Liabilities				
Accrued interest	14,870	26,697	14,913	16,637
Accounts payable	17,299	29,348	14,685	11,818
Current notes	259,447	524,364	169,822	332,174
Government crop loans	2,418	14,305	-	-
Principal due on term debt	77,689	102,977	59,924	133,594
Total current farm liabilities	371,722	697,692	259,344	494,223
Total intermediate farm liabs	225,594	305,751	222,935	289,897
Total long term farm liabilities	264,021	373,876	256,896	375,248
Total farm liabilities	861,337	1,377,318	739,175	1,159,368
Total nonfarm liabilities	43,488	8,305	54,748	82,837
Total liabilities	904,825	1,385,624	793,923	1,242,205
Net worth (farm and nonfarm)	1,061,871	992,748	686,366	2,215,043
Net worth change	87,881	-106,018	67,668	265,853
Percent net worth change	9 %	-10 %	11 %	14 %
<b>Ratio Analysis</b>				
Current farm liabilities / assets	63 %	94 %	69 %	47 %
Intermediate farm liab. / assets	33 %	37 %	41 %	24 %
Long term farm liab. / assets	54 %	63 %	68 %	43 %
Total debt to asset ratio	46 %	58 %	54 %	36 %

**Statement Of Cash Flows**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(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	76	15	15	16
Beginning cash (farm & nonfarm)	31,108	28,796	27,635	42,940
<b>Cash Provided By Operating Activities</b>				
Gross cash farm income	643,063	757,844	426,386	974,249
Total cash farm expense	-545,700	-729,802	-352,891	-764,751
Net cash from hedging transactions	-7,907	-	-719	-3,611
Cash provided by operating	89,456	28,042	72,775	205,886
<b>Cash Provided By Investing Activities</b>				
Sale of breeding livestock	4,208	9,293	10,490	484
Sale of machinery & equipment	7,948	1,687	6,260	24,991
Sale of titled vehicles	1,754	296	4,662	306
Sale of farm land	9,986	50,596	-	-
Sale of farm buildings	71	360	-	-
Sale of other farm assets	39	-	-	188
Sale of nonfarm assets	2,632	-	8,148	-
Purchase of breeding livestock	-27,266	-7,533	-17,387	-57,937
Purchase of machinery & equip.	-72,944	-89,868	-42,639	-128,145
Purchase of titled vehicles	-7,196	-8,113	-8,991	-6,623
Purchase of farm land	-21,651	-1,500	-20,720	-78,185
Purchase of farm buildings	-21,571	-40,451	-4,495	-23,051
Purchase of other farm assets	-138	-100	-303	-180
Purchase of nonfarm assets	-32,445	-24,454	-20,924	-93,096
Cash provided by investing	-156,571	-109,786	-85,899	-361,250
<b>Cash Provided By Financing Activities</b>				
Money borrowed	670,064	1,181,347	444,291	906,515
Principal payments	-582,682	-1,062,439	-412,990	-711,707
Personal income	49,095	65,049	55,548	31,051
Family living/owner withdrawals	-57,613	-70,848	-52,045	-68,789
Income and social security tax	-10,246	-10,095	-6,522	-15,751
Capital contributions	33	55	-	106
Capital distributions	-	-	-	-
Dividends paid	-	-	-	-
Cash gifts and inheritances	406	200	-	28
Gifts given	-20	-6	-	-89
Other cash flows	-	-	-	-
Cash provided by financing	69,038	103,264	28,281	141,364
Net change in cash balance	1,923	21,520	15,157	-14,000
Ending cash (farm & nonfarm)	30,836	47,910	42,949	26,211
Discrepancy	2,196	2,406	-157	2,730

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**Financial Standards Measures**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(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	76	15	15	16
<b>Liquidity</b>				
Current ratio	1.58	1.06	1.45	2.12
Working capital	217,117	43,189	115,645	552,997
Working capital to gross inc	32.4 %	5.9 %	23.4 %	47.2 %
<b>Solvency (cost)</b>				
Farm debt to asset ratio	49 %	64 %	57 %	37 %
Farm equity to asset ratio	51 %	36 %	43 %	63 %
Farm debt to equity ratio	0.96	1.76	1.33	0.59
<b>Profitability (cost)</b>				
Rate of return on farm assets	5.0 %	-5.1 %	5.1 %	11.0 %
Rate of return on farm equity	5.8 %	-19.8 %	7.1 %	15.3 %
Operating profit margin	13.7 %	-17.1 %	14.2 %	29.7 %
Net farm income	100,155	-119,185	76,864	335,974
EBITDA	185,797	-6,408	140,080	462,457
<b>Repayment Capacity</b>				
Capital debt repayment capacity	151,251	-49,336	124,460	394,046
Capital debt repayment margin	51,003	-184,260	51,288	243,428
Replacement margin	38,664	-196,451	37,867	226,276
Term debt coverage ratio	1.51	-0.37	1.70	2.62
Replacement coverage ratio	1.34	-0.34	1.44	2.35
<b>Efficiency</b>				
Asset turnover rate (cost)	36.2 %	30.0 %	35.9 %	37.1 %
Operating expense ratio	73.7 %	100.9 %	71.7 %	59.8 %
Depreciation expense ratio	6.9 %	7.8 %	7.5 %	7.3 %
Interest expense ratio	5.2 %	8.5 %	5.3 %	3.7 %
Net farm income ratio	14.2 %	-17.2 %	15.5 %	29.2 %

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**Crop Production and Marketing Summary**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(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	76	15	15	16
<b>Acreage Summary</b>				
Total acres owned	1,068	1,243	774	1,890
Total crop acres	2,015	3,010	1,332	3,026
Crop acres owned	513	751	353	747
Crop acres cash rented	1,351	1,998	867	1,990
Crop acres share rented	151	261	112	288
Total pasture acres	1,700	1,127	1,404	2,869
Percent crop acres owned	25 %	25 %	27 %	25 %
Mach invest/crop acre cost	257	245	286	281
<b>Average Price Received (Cash Sales Only)</b>				
Wheat, Spring per bushel	6.05	6.06	5.73	6.22
Corn per bushel	3.52	3.69	3.23	3.64
Sunflowers per cwt	20.08	-	-	-
Soybeans per bushel	9.73	-	-	-
Wheat, Winter per bushel	5.96	-	-	-
Wheat, Durum per bushel	6.95	-	-	-
Hay, Mixed Alfalfa/Grass per ton	54.07	-	-	-
Oats per bushel	2.60	-	-	-
Flax per bushel	11.54	-	-	-
Peas, Field per bushel	6.72	-	-	-
Barley per bushel	4.41	-	-	-
<b>Average Yield Per Acre</b>				
Pasture (aum)	0.568	0.461	0.620	0.613
Wheat, Spring (bushel)	48.73	44.35	45.95	57.62
Hay, Mixed Alfalfa/Grass (ton)	1.90	1.54	1.61	2.25
Corn (bushel)	90.03	77.87	113.65	115.72
Sunflowers (cwt)	12.66	11.55	11.36	-
Hay, Grass (ton)	1.30	1.59	-	1.62
Hay, Small Grain (ton)	2.07	-	-	2.00
Corn Silage (ton)	14.67	10.31	-	-
Hay, Alfalfa (ton)	1.69	-	1.76	1.44
Soybeans (bushel)	31.73	-	-	33.96
Wheat, Winter (bushel)	46.81	-	-	-
Oats (bushel)	78.39	-	-	-
Barley (bushel)	75.70	-	-	-
Peas, Field (bushel)	40.26	-	-	43.03
Flax (bushel)	22.19	-	-	-
Hay, Summer Annual Grass (ton)	2.39	-	-	-
Wheat, Durum (bushel)	54.45	-	-	-

**Household and Personal Expenses**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(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	30	5	5	6
Average family size	3.0	3.0	2.8	4.2
Family Living Expenses				
Food and meals expense	9,718	13,655	11,595	9,341
Medical care	6,002	6,958	5,020	8,844
Health insurance	7,026	8,595	2,741	11,770
Cash donations	1,662	2,687	199	3,177
Household supplies	4,618	8,067	4,333	4,891
Clothing	2,311	4,893	1,350	2,066
Personal care	3,410	4,437	3,504	2,644
Child / Dependent care	633	500	-	110
Alimony and child support	420	-	2,519	-
Gifts	2,997	4,022	6,444	3,179
Education	1,858	3,588	987	3,932
Recreation	4,332	4,185	6,314	7,081
Utilities (household share)	3,368	5,315	3,238	2,591
Personal vehicle operating exp	4,251	4,560	6,952	2,024
Household real estate taxes	11	-	-	-
Dwelling rent	680	-	-	-
Household repairs	2,336	2,682	4,267	561
Personal interest	2,079	575	4,234	3,670
Disability / Long term care ins	264	-	1,586	-
Life insurance payments	2,451	5,872	1,388	3,272
Personal property insurance	340	1,073	449	167
Miscellaneous	4,268	4,440	5,148	2,997
Total cash family living expense	65,032	86,104	72,269	72,316
Family living from the farm	580	240	200	1,052
Total family living	65,612	86,344	72,469	73,368
Other Nonfarm Expenditures				
Income taxes	12,099	7,955	7,938	24,636
Furnishing & appliance purchases	-	-	-	-
Nonfarm vehicle purchases	3,627	9,458	10,586	3,099
Nonfarm real estate purchases	33,638	47,266	14,961	110,064
Other nonfarm capital purchases	2,733	6,883	-	-
Nonfarm savings & investments	5,252	42,459	-9,789	4,706
Total other nonfarm expenditures	57,349	114,021	23,696	142,506
Total cash family living investment & nonfarm capital purch	122,381	200,125	95,965	214,822



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**Operator and Labor Information**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(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	76	15	15	16
<b>Operator Information</b>				
Average number of operators	1.1	1.2	1.1	1.1
Average age of operators	44.8	49.6	41.4	45.7
Average number of years farming	20.3	23.4	15.8	23.2
<b>Results Per Operator</b>				
Working capital	193,194	42,026	108,417	505,041
Total assets (cost)	1,902,334	1,953,703	1,387,771	3,163,070
Total liabilities	902,098	1,160,048	744,303	1,153,805
Net worth (cost)	1,000,236	793,655	643,468	2,009,264
Gross farm income	655,940	578,789	463,840	1,082,390
Total farm expense	563,260	678,552	391,780	766,213
Net farm income from operations	92,680	-99,763	72,060	316,177
Net nonfarm income	45,503	54,208	52,076	29,224
Family living & tax withdrawals	64,928	69,457	54,760	82,136
Total acres owned	990.2	1,036.2	725.8	1,779.2
Total crop acres	1,867.5	2,508.5	1,249.0	2,847.6
Crop acres owned	475.5	626.0	331.3	703.4
Crop acres cash rented	1,252.5	1,664.8	812.5	1,873.1
Crop acres share rented	139.5	217.7	105.2	271.0
Total pasture acres	1,575.9	939.2	1,316.5	2,700.7
<b>Labor Analysis</b>				
Number of farms	76	15	15	16
Total unpaid labor hours	2,247	2,340	1,978	2,725
Total hired labor hours	1,200	1,218	174	1,997
Total labor hours per farm	3,446	3,558	2,152	4,722
Unpaid hours per operator	2,083	1,950	1,854	2,565

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**Nonfarm Summary**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(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	76	15	15	16
<b>Nonfarm Income</b>				
Personal wages & salary	27,434	17,514	36,020	9,547
Net nonfarm business income	2,278	25	868	4,399
Personal rental income	2	-	-	-
Personal interest income	450	81	13	2,005
Personal cash dividends	11	-	1	-
Tax refunds	1,638	993	3,320	695
Other nonfarm income	17,284	46,437	15,326	14,404
Total nonfarm income	49,095	65,049	55,548	31,051
Gifts and inheritances	406	200	-	28

**Financial Summary**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(Farms Sorted By Gross Farm Income)**

	<u>Avg. Of All Farms</u>	<u>50,001 - 100,000</u>	<u>100,001 - 250,000</u>	<u>250,001 - 500,000</u>	<u>500,001 - 1,000,000</u>	<u>Over 1,000,000</u>
Number of farms	76	9	6	24	23	12
<b>Income Statement</b>						
Gross cash farm income	643,063	71,880	179,665	369,661	710,579	1,820,809
Total cash farm expense	545,700	62,889	125,248	294,117	626,699	1,543,759
Net cash farm income	97,363	8,991	54,417	75,544	83,880	277,050
Inventory change	51,604	29,962	36,135	67,357	60,562	28,164
Depreciation	-48,970	-4,702	-13,384	-23,479	-65,070	-128,159
Net farm income from operations	99,997	34,251	77,168	119,421	79,372	177,055
Gain or loss on capital sales	158	-	-	331	177	-
Average net farm income	100,155	34,251	77,168	119,752	79,549	177,055
Median net farm income	69,995	33,890	64,490	116,978	63,819	238,989
<b>Profitability (cost)</b>						
Rate of return on assets	5.0 %	7.0 %	9.8 %	9.6 %	3.2 %	4.0 %
Rate of return on equity	5.8 %	12.1 %	17.2 %	15.5 %	2.6 %	3.4 %
Operating profit margin	13.7 %	21.3 %	31.8 %	24.5 %	9.4 %	10.8 %
Asset turnover rate	36.2 %	32.7 %	30.7 %	39.2 %	34.4 %	37.4 %
<b>Liquidity &amp; Repayment (end of year)</b>						
Current assets	588,839	78,912	210,241	327,903	802,071	1,455,420
Current liabilities	371,722	41,381	114,598	171,278	529,883	963,856
Current ratio	1.58	1.91	1.83	1.91	1.51	1.51
Working capital	217,117	37,531	95,643	156,624	272,188	491,564
Working capital to gross inc	32.4 %	35.1 %	44.5 %	35.5 %	33.7 %	28.8 %
Term debt coverage ratio	1.51	4.74	3.07	2.58	1.19	1.12
Replacement coverage ratio	1.34	3.50	2.83	2.38	1.05	1.00
Term debt to EBITDA	2.86	1.99	2.52	2.13	3.35	3.03
<b>Solvency (end of year at cost)</b>						
Number of sole proprietors	71	9	6	23	20	11
Total assets	1,966,696	415,115	778,000	1,265,744	2,459,517	4,710,521
Total liabilities	904,825	212,956	384,947	570,274	1,195,317	1,996,194
Net worth	1,061,871	202,159	393,053	695,470	1,264,200	2,714,327
Net worth change	87,881	43,263	99,666	121,917	60,982	101,355
Farm debt to asset ratio	49 %	58 %	54 %	48 %	52 %	45 %
Total debt to asset ratio	46 %	51 %	49 %	45 %	49 %	42 %
Change in earned net worth %	9 %	27 %	34 %	21 %	5 %	4 %
<b>Nonfarm Information</b>						
Net nonfarm income	49,095	54,917	92,176	44,232	31,926	58,685
Farms reporting living expenses	30	4	5	8	8	5
Total family living expense	65,612	-	53,327	58,876	62,910	104,659
<b>Crop Acres</b>						
Total crop acres	2,015	152	655	1,181	2,576	4,995
Total crop acres owned	513	89	259	335	724	973
Total crop acres cash rented	1,351	51	270	720	1,717	3,651
Total crop acres share rented	151	11	127	126	135	371
Machinery value per crop acre	257	304	154	203	265	282

**Financial Summary**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(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	76	15	17	12	23	9
<b>Income Statement</b>						
Gross cash farm income	643,063	325,216	519,859	665,331	917,876	673,535
Total cash farm expense	545,700	260,829	471,851	587,092	781,069	503,291
Net cash farm income	97,363	64,387	48,008	78,239	136,806	170,244
Inventory change	51,604	52,031	101,299	87,466	49,494	-85,399
Depreciation	-48,970	-15,611	-40,914	-53,406	-74,806	-47,844
Net farm income from operations	99,997	100,808	108,392	112,299	111,494	37,002
Gain or loss on capital sales	158	-	206	662	25	-
Average net farm income	100,155	100,808	108,598	112,962	111,519	37,002
Median net farm income	69,995	68,186	80,326	124,684	70,990	63,225
<b>Profitability (cost)</b>						
Rate of return on assets	5.0 %	10.7 %	6.9 %	5.5 %	3.8 %	1.2 %
Rate of return on equity	5.8 %	23.4 %	13.5 %	6.6 %	3.2 %	-0.6 %
Operating profit margin	13.7 %	24.6 %	19.8 %	13.0 %	10.9 %	4.0 %
Asset turnover rate	36.2 %	43.4 %	34.8 %	42.6 %	34.4 %	31.4 %
<b>Liquidity &amp; Repayment (end of year)</b>						
Current assets	588,839	311,954	519,015	615,786	829,768	578,157
Current liabilities	371,722	216,113	415,520	299,848	501,744	333,416
Current ratio	1.58	1.44	1.25	2.05	1.65	1.73
Working capital	217,117	95,841	103,494	315,939	328,025	244,742
Working capital to gross inc	32.4 %	24.0 %	16.5 %	41.4 %	37.7 %	40.2 %
Term debt coverage ratio	1.51	2.48	1.53	1.50	1.37	1.02
Replacement coverage ratio	1.34	2.37	1.51	1.23	1.19	0.86
Term debt to EBITDA	2.86	2.31	3.23	2.19	3.14	2.76
<b>Solvency (end of year at cost)</b>						
Number of sole proprietors	71	15	16	11	21	8
Total assets	1,966,696	1,031,139	1,722,397	1,828,880	2,881,287	1,998,159
Total liabilities	904,825	652,335	1,103,620	594,877	1,213,194	597,367
Net worth	1,061,871	378,804	618,777	1,234,003	1,668,093	1,400,792
Net worth change	87,881	111,425	89,324	104,301	96,507	-4,371
Farm debt to asset ratio	49 %	65 %	67 %	35 %	44 %	34 %
Total debt to asset ratio	46 %	63 %	64 %	33 %	42 %	30 %
Change in earned net worth %	9 %	42 %	17 %	9 %	6 %	0 %
<b>Nonfarm Information</b>						
Net nonfarm income	49,095	50,452	38,670	22,360	60,945	71,891
Farms reporting living expenses	30	7	5	2	13	3
Total family living expense	65,612	41,633	64,815	-	80,533	-
<b>Crop Acres</b>						
Total crop acres	2,015	1,124	1,624	2,565	2,627	1,941
Total crop acres owned	513	142	317	485	827	736
Total crop acres cash rented	1,351	885	1,210	1,891	1,581	1,088
Total crop acres share rented	151	96	97	189	219	117
Machinery value per crop acre	257	161	223	238	309	260

**Financial Summary**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(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	76	27	17	21	9
<b>Income Statement</b>					
Gross cash farm income	643,063	810,469	242,381	620,212	540,521
Total cash farm expense	545,700	714,471	179,653	491,970	522,004
Net cash farm income	97,363	95,997	62,728	128,242	18,517
Inventory change	51,604	51,017	53,672	24,579	153,438
Depreciation	-48,970	-73,008	-14,232	-44,188	-38,839
Net farm income from operations	99,997	74,006	102,168	108,633	133,116
Gain or loss on capital sales	158	21	-	167	883
Average net farm income	100,155	74,028	102,168	108,800	133,999
Median net farm income	69,995	28,535	90,063	118,589	63,225
<b>Profitability (cost)</b>					
Rate of return on assets	5.0 %	2.4 %	11.7 %	5.4 %	9.5 %
Rate of return on equity	5.8 %	1.0 %	20.6 %	7.0 %	21.2 %
Operating profit margin	13.7 %	6.3 %	35.6 %	15.9 %	26.6 %
Asset turnover rate	36.2 %	38.4 %	32.9 %	33.8 %	35.5 %
<b>Liquidity &amp; Repayment (end of year)</b>					
Current assets	588,839	836,276	245,801	604,276	541,989
Current liabilities	371,722	529,623	107,629	391,300	445,077
Current ratio	1.58	1.58	2.28	1.54	1.22
Working capital	217,117	306,653	138,172	212,977	96,912
Working capital to gross inc	32.4 %	32.8 %	45.9 %	32.9 %	14.2 %
Term debt coverage ratio	1.51	1.04	3.46	1.70	1.80
Replacement coverage ratio	1.34	0.87	3.14	1.60	1.76
Term debt to EBITDA	2.86	3.00	2.11	2.61	2.93
<b>Solvency (end of year at cost)</b>					
Number of sole proprietors	71	24	17	21	8
Total assets	1,966,696	2,797,726	882,415	1,937,339	1,794,511
Total liabilities	904,825	1,120,355	428,867	926,456	1,197,843
Net worth	1,061,871	1,677,371	453,548	1,010,883	596,668
Net worth change	87,881	58,583	97,015	82,052	163,834
Farm debt to asset ratio	49 %	44 %	50 %	49 %	71 %
Total debt to asset ratio	46 %	40 %	49 %	48 %	67 %
Change in earned net worth %	9 %	4 %	27 %	9 %	38 %
<b>Nonfarm Information</b>					
Net nonfarm income	49,095	50,271	41,401	53,151	53,191
Farms reporting living expenses	30	10	9	8	3
Total family living expense	65,612	80,751	52,152	59,936	-
<b>Crop Acres</b>					
Total crop acres	2,015	3,251	506	1,984	1,457
Total crop acres owned	513	706	234	615	224
Total crop acres cash rented	1,351	2,257	186	1,286	1,183
Total crop acres share rented	151	288	86	83	50
Machinery value per crop acre	257	265	265	236	203



## 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.

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Barley on Owned Land**

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	<u><b>Avg. Of All Farms</b></u>
Number of farms	5
Yield per acre (bu.)	74.64
Operators share of yield %	100.00
Value per bu.	3.44
Other product return per acre	11.32
Total product return per acre	267.78
Gross return per acre	267.78
<b>Direct Expenses</b>	
Seed	26.23
Fertilizer	65.09
Crop chemicals	23.64
Crop insurance	24.42
Fuel & oil	15.80
Repairs	21.18
Custom hire	2.61
Operating interest	0.81
Total direct expenses per acre	179.78
Return over direct exp per acre	87.99
<b>Overhead Expenses</b>	
Hired labor	11.23
Machinery leases	0.18
Building leases	0.11
RE & pers. property taxes	3.26
Farm insurance	7.72
Utilities	4.45
Dues & professional fees	0.60
Interest	22.23
Mach & bldg depreciation	25.89
Miscellaneous	9.09
Total overhead expenses per acre	84.75
Total dir & ovhd expenses per acre	264.54
Net return per acre	3.24
Government payments	-
Net return with govt pmts	3.24
Labor & management charge	22.59
Net return over lbr & mgt	-19.35
<b>Cost of Production</b>	
Total direct expense per bu.	2.41
Total dir & ovhd exp per bu.	3.54
Less govt & other income	3.39
With labor & management	3.70
Net value per unit	3.44
Machinery cost per acre	63.55
Est. labor hours per acre	1.84

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Corn on Owned Land**

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	<u><b>Avg. Of All Farms</b></u>
Number of farms	16
Yield per acre (bu.)	95.24
Operators share of yield %	100.00
Value per bu.	3.29
Other product return per acre	0.95
Total product return per acre	314.66
Crop insurance per acre	0.34
Gross return per acre	315.00
<b>Direct Expenses</b>	
Seed	69.63
Fertilizer	73.26
Crop chemicals	18.23
Crop insurance	13.96
Fuel & oil	17.27
Repairs	23.06
Custom hire	11.24
Operating interest	7.51
Total direct expenses per acre	234.21
Return over direct exp per acre	80.79
<b>Overhead Expenses</b>	
Custom hire	4.14
Hired labor	5.74
Machinery leases	1.47
RE & pers. property taxes	3.24
Farm insurance	3.78
Utilities	4.66
Dues & professional fees	0.28
Interest	20.23
Mach & bldg depreciation	29.10
Miscellaneous	4.94
Total overhead expenses per acre	77.58
Total dir & ovhd expenses per acre	311.78
Net return per acre	3.22
Government payments	0.33
Net return with govt pmts	3.55
Labor & management charge	23.51
Net return over lbr & mgt	-19.96
<b>Cost of Production</b>	
Total direct expense per bu.	2.46
Total dir & ovhd exp per bu.	3.27
Less govt & other income	3.26
With labor & management	3.50
Net value per unit	3.29
Machinery cost per acre	87.80
Est. labor hours per acre	1.50

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Corn on Cash Rent**

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	<u>Avg. Of All Farms</u>
Number of farms	24
Yield per acre (bu.)	90.58
Operators share of yield %	100.00
Value per bu.	3.28
Total product return per acre	297.24
Crop insurance per acre	3.68
Other crop income per acre	1.41
Gross return per acre	302.33
<b>Direct Expenses</b>	
Seed	64.61
Fertilizer	77.08
Crop chemicals	16.60
Crop insurance	14.16
Storage	0.27
Fuel & oil	18.33
Repairs	23.52
Custom hire	8.48
Land rent	42.37
Operating interest	8.09
Total direct expenses per acre	273.50
Return over direct exp per acre	28.83
<b>Overhead Expenses</b>	
Custom hire	5.87
Hired labor	11.21
Machinery leases	2.34
Farm insurance	3.36
Utilities	2.85
Dues & professional fees	0.42
Interest	4.78
Mach & bldg depreciation	29.51
Miscellaneous	2.89
Total overhead expenses per acre	63.23
Total dir & ovhd expenses per acre	336.72
Net return per acre	-34.40
Government payments	-
Net return with govt pmts	-34.40
Labor & management charge	24.68
Net return over lbr & mgt	-59.08
<b>Cost of Production</b>	
Total direct expense per bu.	3.02
Total dir & ovhd exp per bu.	3.72
Less govt & other income	3.66
With labor & management	3.93
Net value per unit	3.28
Machinery cost per acre	90.18
Est. labor hours per acre	1.52

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Corn Silage on Owned Land**

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	<u><b>Avg. Of All Farms</b></u>
Number of farms	12
Yield per acre (ton)	13.71
Operators share of yield %	100.00
Value per ton	29.43
Other product return per acre	1.92
Total product return per acre	405.47
Crop insurance per acre	0.39
Gross return per acre	405.85
<b>Direct Expenses</b>	
Seed	71.65
Fertilizer	74.44
Crop chemicals	17.29
Crop insurance	14.04
Fuel & oil	25.82
Repairs	28.74
Custom hire	29.20
Operating interest	4.70
Total direct expenses per acre	265.90
Return over direct exp per acre	139.96
<b>Overhead Expenses</b>	
Hired labor	4.45
Machinery leases	0.55
RE & pers. property taxes	2.81
Farm insurance	3.36
Utilities	2.24
Dues & professional fees	0.53
Interest	17.25
Mach & bldg depreciation	29.28
Miscellaneous	7.29
Total overhead expenses per acre	67.76
Total dir & ovhd expenses per acre	333.66
Net return per acre	72.20
Government payments	0.89
Net return with govt pmts	73.09
Labor & management charge	32.93
Net return over lbr & mgt	40.16
<b>Cost of Production</b>	
Total direct expense per ton	19.39
Total dir & ovhd exp per ton	24.33
Less govt & other income	24.10
With labor & management	26.50
Net value per unit	29.43
Machinery cost per acre	115.56
Est. labor hours per acre	2.37

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Corn Silage on Cash Rent**

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	<u><b>Avg. Of All Farms</b></u>
Number of farms	7
Yield per acre (ton)	11.23
Operators share of yield %	100.00
Value per ton	26.51
Total product return per acre	297.71
Gross return per acre	297.71
<b>Direct Expenses</b>	
Seed	70.94
Fertilizer	67.63
Crop chemicals	15.32
Crop insurance	12.07
Fuel & oil	24.40
Repairs	20.61
Custom hire	54.06
Land rent	32.36
Operating interest	10.00
Total direct expenses per acre	307.39
Return over direct exp per acre	-9.68
<b>Overhead Expenses</b>	
Custom hire	2.88
Hired labor	2.24
Machinery leases	1.06
Farm insurance	1.85
Utilities	1.55
Interest	4.75
Mach & bldg depreciation	22.69
Miscellaneous	3.28
Total overhead expenses per acre	40.30
Total dir & ovhd expenses per acre	347.69
Net return per acre	-49.98
Government payments	-
Net return with govt pmts	-49.98
Labor & management charge	24.79
Net return over lbr & mgt	-74.77
<b>Cost of Production</b>	
Total direct expense per ton	27.37
Total dir & ovhd exp per ton	30.96
Less govt & other income	30.96
With labor & management	33.17
Net value per unit	26.51
Machinery cost per acre	128.57
Est. labor hours per acre	2.00

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**CRP on Owned Land**

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	<u>Avg. Of All Farms</u>
Number of farms	5
Yield per acre (\$)	25.56
Operators share of yield %	100.00
Value per \$	1.00
Total product return per acre	25.56
Gross return per acre	25.56
<b>Direct Expenses</b>	
Repairs	0.64
Total direct expenses per acre	1.23
Return over direct exp per acre	24.33
<b>Overhead Expenses</b>	
Hired labor	0.05
RE & pers. property taxes	1.69
Interest	1.34
Mach & bldg depreciation	0.45
Miscellaneous	0.30
Total overhead expenses per acre	3.83
Total dir & ovhd expenses per acre	5.06
Net return per acre	20.50

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Flax on Cash Rent**

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	<u><b>Avg. Of All Farms</b></u>
Number of farms	5
Yield per acre (bu.)	19.46
Operators share of yield %	100.00
Value per bu.	11.94
Total product return per acre	232.45
Crop insurance per acre	8.80
Gross return per acre	241.26
<b>Direct Expenses</b>	
Seed	16.62
Fertilizer	39.36
Crop chemicals	15.93
Crop insurance	14.25
Fuel & oil	12.55
Repairs	12.66
Custom hire	10.25
Hired labor	2.91
Land rent	32.98
Operating interest	1.24
Total direct expenses per acre	158.74
Return over direct exp per acre	82.51
<b>Overhead Expenses</b>	
Building leases	0.03
Farm insurance	3.39
Utilities	2.21
Dues & professional fees	1.26
Interest	1.98
Mach & bldg depreciation	21.02
Miscellaneous	7.62
Total overhead expenses per acre	37.51
Total dir & ovhd expenses per acre	196.25
Net return per acre	45.00
Government payments	-
Net return with govt pmts	45.00
Labor & management charge	18.32
Net return over lbr & mgt	26.68
<b>Cost of Production</b>	
Total direct expense per bu.	8.16
Total dir & ovhd exp per bu.	10.08
Less govt & other income	9.63
With labor & management	10.57
Net value per unit	11.94
Machinery cost per acre	55.84
Est. labor hours per acre	1.20

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Hay, Alfalfa on Owned Land**

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	<u><b>Avg. Of All Farms</b></u>
Number of farms	9
Yield per acre (ton)	2.19
Operators share of yield %	100.00
Value per ton	78.15
Other product return per acre	4.97
Total product return per acre	176.43
Crop insurance per acre	8.24
Gross return per acre	184.67
<b>Direct Expenses</b>	
Seed	2.24
Fertilizer	2.93
Crop chemicals	3.62
Crop insurance	7.36
Fuel & oil	13.44
Repairs	16.75
Custom hire	3.42
Operating interest	1.60
Total direct expenses per acre	51.36
Return over direct exp per acre	133.30
<b>Overhead Expenses</b>	
Custom hire	0.54
Hired labor	3.67
RE & pers. property taxes	3.47
Farm insurance	4.72
Utilities	2.25
Dues & professional fees	0.44
Interest	14.10
Mach & bldg depreciation	14.79
Miscellaneous	2.26
Total overhead expenses per acre	46.23
Total dir & ovhd expenses per acre	97.60
Net return per acre	87.07
Government payments	-
Net return with govt pmts	87.07
Labor & management charge	16.03
Net return over lbr & mgt	71.04
<b>Cost of Production</b>	
Total direct expense per ton	23.41
Total dir & ovhd exp per ton	44.48
Less govt & other income	38.46
With labor & management	45.77
Net value per unit	78.15
Machinery cost per acre	48.91
Est. labor hours per acre	1.12

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Hay, Alfalfa on Cash Rent**

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	<u><b>Avg. Of All Farms</b></u>
Number of farms	12
Yield per acre (ton)	1.46
Operators share of yield %	100.00
Value per ton	86.87
Other product return per acre	6.26
Total product return per acre	133.34
Crop insurance per acre	6.54
Other crop income per acre	1.59
Gross return per acre	141.47
<b>Direct Expenses</b>	
Seed	5.13
Fertilizer	2.96
Crop chemicals	0.80
Crop insurance	11.60
Fuel & oil	8.41
Repairs	14.80
Custom hire	1.69
Land rent	27.22
Operating interest	3.64
Total direct expenses per acre	76.24
Return over direct exp per acre	65.23
<b>Overhead Expenses</b>	
Hired labor	6.50
Machinery leases	0.56
Farm insurance	3.32
Utilities	1.58
Dues & professional fees	0.64
Interest	3.85
Mach & bldg depreciation	11.22
Miscellaneous	1.20
Total overhead expenses per acre	28.87
Total dir & ovhd expenses per acre	105.11
Net return per acre	36.35
Government payments	-
Net return with govt pmts	36.35
Labor & management charge	12.07
Net return over lbr & mgt	24.28
<b>Cost of Production</b>	
Total direct expense per ton	52.12
Total dir & ovhd exp per ton	71.86
Less govt & other income	62.02
With labor & management	70.27
Net value per unit	86.87
Machinery cost per acre	38.57
Est. labor hours per acre	0.84

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Hay, Grass on Cash Rent**

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	<u>Avg. Of All Farms</u>
Number of farms	8
Yield per acre (ton)	1.43
Operators share of yield %	100.00
Value per ton	55.10
Total product return per acre	78.61
Gross return per acre	78.61
<b>Direct Expenses</b>	
Fuel & oil	7.36
Repairs	10.29
Custom hire	1.14
Land rent	23.82
Operating interest	2.98
Miscellaneous	0.12
Total direct expenses per acre	45.71
Return over direct exp per acre	32.90
<b>Overhead Expenses</b>	
Custom hire	0.53
Hired labor	0.94
Machinery leases	0.55
Farm insurance	0.58
Interest	1.00
Mach & bldg depreciation	9.57
Miscellaneous	1.64
Total overhead expenses per acre	14.81
Total dir & ovhd expenses per acre	60.52
Net return per acre	18.09
Government payments	-
Net return with govt pmts	18.09
Labor & management charge	9.97
Net return over lbr & mgt	8.11
<b>Cost of Production</b>	
Total direct expense per ton	32.04
Total dir & ovhd exp per ton	42.42
Less govt & other income	42.42
With labor & management	49.41
Net value per unit	55.10
Machinery cost per acre	29.36
Est. labor hours per acre	0.78

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

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

	<u>Avg. Of All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	22	5	5
Yield per acre (ton)	2.02	2.05	2.81
Operators share of yield %	100.00	100.00	100.00
Value per ton	56.25	58.51	63.32
Other product return per acre	0.80	-	-
Total product return per acre	114.15	119.80	177.78
Crop insurance per acre	1.15	1.58	4.15
Gross return per acre	115.30	121.38	181.93
<b>Direct Expenses</b>			
Seed	0.30	0.88	-
Fertilizer	1.04	-	11.42
Crop insurance	3.48	3.27	1.80
Fuel & oil	8.46	9.78	8.57
Repairs	9.60	11.08	5.64
Custom hire	0.84	1.63	-
Operating interest	1.85	2.29	2.49
Miscellaneous	0.12	0.34	-
Total direct expenses per acre	25.69	29.27	29.93
Return over direct exp per acre	89.61	92.10	152.00
<b>Overhead Expenses</b>			
Custom hire	0.36	0.85	0.77
Hired labor	3.69	2.36	2.13
Machinery leases	1.59	0.58	1.31
RE & pers. property taxes	2.79	2.76	1.84
Farm insurance	2.76	2.94	1.71
Utilities	1.92	2.41	1.40
Dues & professional fees	0.37	0.26	0.28
Interest	10.04	6.35	18.45
Mach & bldg depreciation	8.46	11.31	5.55
Miscellaneous	2.02	1.35	2.62
Total overhead expenses per acre	34.00	31.17	36.07
Total dir & ovhd expenses per acre	59.69	60.44	66.00
Net return per acre	55.61	60.94	115.93
Government payments	-	-	-
Net return with govt pmts	55.61	60.94	115.93
Labor & management charge	12.65	13.67	9.07
Net return over lbr & mgt	42.95	47.27	106.86
<b>Cost of Production</b>			
Total direct expense per ton	12.75	14.30	10.66
Total dir & ovhd exp per ton	29.62	29.52	23.51
Less govt & other income	28.65	28.75	22.03
With labor & management	34.93	35.43	25.26
Net value per unit	56.25	58.51	63.32
Machinery cost per acre	30.73	35.97	25.64
Est. labor hours per acre	0.88	1.10	0.59

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

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

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	<u>Avg. Of All Farms</u>
Number of farms	24
Yield per acre (ton)	2.00
Operators share of yield %	100.00
Value per ton	53.86
Total product return per acre	107.48
Crop insurance per acre	3.33
Gross return per acre	110.81
<b>Direct Expenses</b>	
Fertilizer	1.45
Crop insurance	3.13
Fuel & oil	8.30
Repairs	10.82
Custom hire	0.47
Land rent	21.88
Operating interest	1.99
Total direct expenses per acre	48.31
Return over direct exp per acre	62.50
<b>Overhead Expenses</b>	
Custom hire	0.51
Hired labor	3.72
Machinery leases	1.57
Farm insurance	3.24
Utilities	1.71
Dues & professional fees	0.52
Interest	2.60
Mach & bldg depreciation	9.97
Miscellaneous	1.89
Total overhead expenses per acre	25.73
Total dir & ovhd expenses per acre	74.03
Net return per acre	36.77
Government payments	-
Net return with govt pmts	36.77
Labor & management charge	12.35
Net return over lbr & mgt	24.42
<b>Cost of Production</b>	
Total direct expense per ton	24.21
Total dir & ovhd exp per ton	37.10
Less govt & other income	35.43
With labor & management	41.62
Net value per unit	53.86
Machinery cost per acre	33.23
Est. labor hours per acre	0.86

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Hay, Small Grain on Owned Land**

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	<u><b>Avg. Of All Farms</b></u>
Number of farms	9
Yield per acre (ton)	2.75
Operators share of yield %	100.00
Value per ton	55.88
Total product return per acre	153.91
Other crop income per acre	0.53
Gross return per acre	154.44
<b>Direct Expenses</b>	
Seed	10.72
Fertilizer	34.72
Crop chemicals	9.95
Crop insurance	5.46
Fuel & oil	11.47
Repairs	12.36
Custom hire	4.74
Operating interest	1.30
Total direct expenses per acre	90.72
Return over direct exp per acre	63.71
<b>Overhead Expenses</b>	
Custom hire	0.09
Hired labor	2.83
Machinery leases	1.16
RE & pers. property taxes	2.84
Farm insurance	3.66
Utilities	2.35
Dues & professional fees	0.53
Interest	11.91
Mach & bldg depreciation	11.69
Miscellaneous	7.09
Total overhead expenses per acre	44.16
Total dir & ovhd expenses per acre	134.88
Net return per acre	19.56
Government payments	-
Net return with govt pmts	19.56
Labor & management charge	16.84
Net return over lbr & mgt	2.72
<b>Cost of Production</b>	
Total direct expense per ton	32.94
Total dir & ovhd exp per ton	48.97
Less govt & other income	48.78
With labor & management	54.89
Net value per unit	55.88
Machinery cost per acre	44.27
Est. labor hours per acre	1.11

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Hay, Small Grain on Cash Rent**

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	<u><b>Avg. Of All Farms</b></u>
Number of farms	11
Yield per acre (ton)	1.67
Operators share of yield %	100.00
Value per ton	54.88
Total product return per acre	91.76
Crop insurance per acre	8.61
Other crop income per acre	0.36
Gross return per acre	100.73
<b>Direct Expenses</b>	
Seed	16.05
Fertilizer	31.03
Crop chemicals	14.50
Crop insurance	4.19
Fuel & oil	10.87
Repairs	12.32
Custom hire	2.09
Land rent	27.85
Operating interest	2.66
Total direct expenses per acre	121.56
Return over direct exp per acre	-20.82
<b>Overhead Expenses</b>	
Hired labor	1.79
Machinery leases	0.82
Farm insurance	2.59
Utilities	2.44
Dues & professional fees	0.69
Interest	2.48
Mach & bldg depreciation	8.28
Miscellaneous	7.68
Total overhead expenses per acre	26.77
Total dir & ovhd expenses per acre	148.33
Net return per acre	-47.59
Government payments	3.47
Net return with govt pmts	-44.13
Labor & management charge	14.05
Net return over lbr & mgt	-58.18
<b>Cost of Production</b>	
Total direct expense per ton	72.70
Total dir & ovhd exp per ton	88.71
Less govt & other income	81.27
With labor & management	89.68
Net value per unit	54.88
Machinery cost per acre	36.43
Est. labor hours per acre	1.12

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Oats on Cash Rent**

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	<u><b>Avg. Of All Farms</b></u>
Number of farms	5
Yield per acre (bu.)	56.75
Operators share of yield %	100.00
Value per bu.	2.32
Other product return per acre	5.69
Total product return per acre	137.60
Crop insurance per acre	19.01
Gross return per acre	156.62
<b>Direct Expenses</b>	
Seed	8.63
Fertilizer	43.85
Crop chemicals	15.92
Crop insurance	7.93
Fuel & oil	15.18
Repairs	14.39
Custom hire	18.47
Land rent	31.64
Operating interest	3.93
Total direct expenses per acre	159.94
Return over direct exp per acre	-3.32
<b>Overhead Expenses</b>	
Hired labor	3.49
Machinery leases	0.64
Farm insurance	2.97
Utilities	3.44
Dues & professional fees	0.70
Interest	3.38
Mach & bldg depreciation	13.60
Miscellaneous	3.74
Total overhead expenses per acre	31.96
Total dir & ovhd expenses per acre	191.90
Net return per acre	-35.29
Government payments	3.92
Net return with govt pmts	-31.37
Labor & management charge	15.37
Net return over lbr & mgt	-46.74
<b>Cost of Production</b>	
Total direct expense per bu.	2.82
Total dir & ovhd exp per bu.	3.38
Less govt & other income	2.88
With labor & management	3.15
Net value per unit	2.32
Machinery cost per acre	65.19
Est. labor hours per acre	1.19

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Pasture on Owned Land**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	30	6	6	6
Yield per acre (aum)	0.57	0.45	0.42	0.78
Operators share of yield %	100.00	100.00	100.00	100.00
Value per aum	21.41	20.29	18.40	23.74
Total product return per acre	12.28	9.14	7.72	18.59
Crop insurance per acre	0.09	-	0.03	0.25
Gross return per acre	12.37	9.14	7.75	18.84
<b>Direct Expenses</b>				
Total direct expenses per acre	1.26	0.78	1.04	1.41
Return over direct exp per acre	11.11	8.36	6.71	17.42
<b>Overhead Expenses</b>				
RE & pers. property taxes	1.33	0.79	1.20	1.38
Interest	4.92	11.24	2.62	2.28
Mach & bldg depreciation	0.47	0.31	0.43	0.60
Miscellaneous	0.58	0.50	0.65	0.72
Total overhead expenses per acre	7.30	12.85	4.90	4.98
Total dir & ovhd expenses per acre	8.55	13.63	5.94	6.39
Net return per acre	3.81	-4.49	1.81	12.45

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Pasture on Cash Rent**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	39	7	8	8
Yield per acre (aum)	0.56	0.52	0.51	0.84
Operators share of yield %	100.00	100.00	100.00	100.00
Value per aum	20.99	18.00	21.94	22.34
Total product return per acre	11.77	9.37	11.14	18.77
Crop insurance per acre	0.02	-	-	0.16
Gross return per acre	11.80	9.37	11.14	18.92
<b>Direct Expenses</b>				
Repairs	0.52	0.55	0.44	0.40
Land rent	12.53	18.56	11.63	12.83
Total direct expenses per acre	13.76	19.72	12.65	14.06
Return over direct exp per acre	-1.97	-10.35	-1.51	4.87
<b>Overhead Expenses</b>				
Mach & bldg depreciation	0.47	0.42	0.54	0.48
Miscellaneous	0.75	1.08	0.78	1.08
Total overhead expenses per acre	1.22	1.50	1.32	1.56
Total dir & ovhd expenses per acre	14.98	21.22	13.97	15.61
Net return per acre	-3.18	-11.85	-2.83	3.31

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Peas, Field on Cash Rent**

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	<u><b>Avg. Of All Farms</b></u>
Number of farms	6
Yield per acre (bu.)	35.50
Operators share of yield %	100.00
Value per bu.	7.71
Total product return per acre	273.59
Crop insurance per acre	9.23
Other crop income per acre	1.60
Gross return per acre	284.42
<b>Direct Expenses</b>	
Seed	43.29
Fertilizer	9.81
Crop chemicals	44.23
Crop insurance	17.11
Fuel & oil	11.12
Repairs	16.06
Custom hire	5.21
Hired labor	2.83
Land rent	30.23
Operating interest	4.96
Miscellaneous	0.25
Total direct expenses per acre	185.08
Return over direct exp per acre	99.34
<b>Overhead Expenses</b>	
Custom hire	0.39
Hired labor	9.21
Machinery leases	4.33
Building leases	0.05
Farm insurance	3.86
Utilities	2.12
Dues & professional fees	1.47
Interest	3.47
Mach & bldg depreciation	20.15
Miscellaneous	6.49
Total overhead expenses per acre	51.56
Total dir & ovhd expenses per acre	236.64
Net return per acre	47.78
Government payments	-
Net return with govt pmts	47.78
Labor & management charge	18.25
Net return over lbr & mgt	29.54
<b>Cost of Production</b>	
Total direct expense per bu.	5.21
Total dir & ovhd exp per bu.	6.67
Less govt & other income	6.36
With labor & management	6.87
Net value per unit	7.71
Machinery cost per acre	58.24
Est. labor hours per acre	1.33

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Prevented Planting on Cash Rent**

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	<u>Avg. Of All Farms</u>
Number of farms	11
Yield per acre	-
Operators share of yield %	-
Value	-
Total product return per acre	-
Crop insurance per acre	95.81
Gross return per acre	95.81
<b>Direct Expenses</b>	
Crop chemicals	5.36
Crop insurance	10.73
Fuel & oil	3.87
Repairs	4.91
Custom hire	0.24
Land rent	35.04
Operating interest	1.74
Total direct expenses per acre	61.91
Return over direct exp per acre	33.91
<b>Overhead Expenses</b>	
Custom hire	0.71
Hired labor	1.95
Machinery leases	1.28
Farm insurance	2.83
Utilities	1.58
Dues & professional fees	0.40
Interest	4.42
Mach & bldg depreciation	5.69
Miscellaneous	2.75
Total overhead expenses per acre	21.62
Total dir & ovhd expenses per acre	83.52
Net return per acre	12.29
Government payments	-
Net return with govt pmts	12.29
Labor & management charge	6.84
Net return over lbr & mgt	5.45

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Soybeans on Owned Land**

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	<u><b>Avg. Of All Farms</b></u>
Number of farms	7
Yield per acre (bu.)	27.21
Operators share of yield %	100.00
Value per bu.	8.99
Total product return per acre	244.66
Gross return per acre	244.66
<b>Direct Expenses</b>	
Seed	74.24
Fertilizer	13.53
Crop chemicals	20.46
Crop insurance	8.85
Fuel & oil	14.60
Repairs	17.80
Custom hire	14.02
Operating interest	4.27
Total direct expenses per acre	168.05
Return over direct exp per acre	76.61
<b>Overhead Expenses</b>	
Custom hire	2.13
Hired labor	3.02
Machinery leases	3.08
Building leases	0.29
RE & pers. property taxes	4.38
Farm insurance	2.47
Utilities	2.41
Interest	11.45
Mach & bldg depreciation	20.35
Miscellaneous	3.37
Total overhead expenses per acre	52.95
Total dir & ovhd expenses per acre	221.00
Net return per acre	23.66
Government payments	-
Net return with govt pmts	23.66
Labor & management charge	16.45
Net return over lbr & mgt	7.21
<b>Cost of Production</b>	
Total direct expense per bu.	6.18
Total dir & ovhd exp per bu.	8.12
Less govt & other income	8.12
With labor & management	8.73
Net value per unit	8.99
Machinery cost per acre	70.93
Est. labor hours per acre	0.87

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Soybeans on Cash Rent**

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	<u><b>Avg. Of All Farms</b></u>
Number of farms	10
Yield per acre (bu.)	32.82
Operators share of yield %	100.00
Value per bu.	8.64
Total product return per acre	283.62
Crop insurance per acre	1.37
Gross return per acre	284.99
<b>Direct Expenses</b>	
Seed	68.38
Fertilizer	19.08
Crop chemicals	15.29
Crop insurance	12.13
Fuel & oil	14.91
Repairs	13.67
Custom hire	14.33
Hired labor	0.59
Land rent	52.33
Operating interest	2.49
Miscellaneous	0.82
Total direct expenses per acre	214.01
Return over direct exp per acre	70.97
<b>Overhead Expenses</b>	
Custom hire	0.15
Hired labor	7.35
Machinery leases	0.53
Building leases	0.04
Farm insurance	2.80
Utilities	2.84
Interest	2.67
Mach & bldg depreciation	21.80
Miscellaneous	4.15
Total overhead expenses per acre	42.30
Total dir & ovhd expenses per acre	256.32
Net return per acre	28.67
Government payments	-
Net return with govt pmts	28.67
Labor & management charge	17.60
Net return over lbr & mgt	11.07
<b>Cost of Production</b>	
Total direct expense per bu.	6.52
Total dir & ovhd exp per bu.	7.81
Less govt & other income	7.77
With labor & management	8.30
Net value per unit	8.64
Machinery cost per acre	66.14
Est. labor hours per acre	1.01

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Sunflowers on Owned Land**

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	<u><b>Avg. Of All Farms</b></u>
Number of farms	8
Yield per acre (cwt.)	13.36
Operators share of yield %	100.00
Value per cwt.	19.27
Total product return per acre	257.36
Crop insurance per acre	12.23
Gross return per acre	269.59
<b>Direct Expenses</b>	
Seed	36.92
Fertilizer	48.67
Crop chemicals	37.28
Crop insurance	10.44
Fuel & oil	14.77
Repairs	11.41
Custom hire	22.42
Operating interest	4.07
Miscellaneous	0.57
Total direct expenses per acre	186.55
Return over direct exp per acre	83.04
<b>Overhead Expenses</b>	
Custom hire	0.89
Hired labor	3.75
Machinery leases	1.02
RE & pers. property taxes	3.01
Farm insurance	2.48
Utilities	3.70
Dues & professional fees	0.15
Interest	29.19
Mach & bldg depreciation	16.54
Miscellaneous	2.36
Total overhead expenses per acre	63.09
Total dir & ovhd expenses per acre	249.64
Net return per acre	19.95
Government payments	-
Net return with govt pmts	19.95
Labor & management charge	20.33
Net return over lbr & mgt	-0.38
<b>Cost of Production</b>	
Total direct expense per cwt.	13.97
Total dir & ovhd exp per cwt.	18.69
Less govt & other income	17.78
With labor & management	19.30
Net value per unit	19.27
Machinery cost per acre	68.57
Est. labor hours per acre	0.91

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Sunflowers on Cash Rent**

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	<u>Avg. Of All Farms</u>
Number of farms	21
Yield per acre (cwt.)	12.77
Operators share of yield %	100.00
Value per cwt.	20.39
Total product return per acre	260.42
Crop insurance per acre	17.37
Other crop income per acre	0.62
Gross return per acre	278.42
<b>Direct Expenses</b>	
Seed	36.00
Fertilizer	55.02
Crop chemicals	36.98
Crop insurance	11.92
Fuel & oil	16.23
Repairs	19.94
Custom hire	15.27
Land rent	42.04
Operating interest	6.47
Miscellaneous	0.67
Total direct expenses per acre	240.54
Return over direct exp per acre	37.88
<b>Overhead Expenses</b>	
Custom hire	0.93
Hired labor	8.10
Machinery leases	0.97
Farm insurance	2.75
Utilities	2.61
Dues & professional fees	0.52
Interest	3.60
Mach & bldg depreciation	19.94
Miscellaneous	3.25
Total overhead expenses per acre	42.66
Total dir & ovhd expenses per acre	283.21
Net return per acre	-4.79
Government payments	0.72
Net return with govt pmts	-4.06
Labor & management charge	20.53
Net return over lbr & mgt	-24.59
<b>Cost of Production</b>	
Total direct expense per cwt.	18.83
Total dir & ovhd exp per cwt.	22.17
Less govt & other income	20.71
With labor & management	22.31
Net value per unit	20.39
Machinery cost per acre	74.39
Est. labor hours per acre	1.12

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**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 farms	25	5	5	5
Yield per acre (bu.)	48.62	26.01	41.58	60.06
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	5.42	4.23	5.49	5.62
Other product return per acre	0.14	-	-	-
Total product return per acre	263.48	110.09	228.12	337.77
Crop insurance per acre	7.03	28.50	-	-
Other crop income per acre	1.24	-	-	1.87
Gross return per acre	271.75	138.60	228.12	339.64
<b>Direct Expenses</b>				
Seed	15.02	14.02	14.42	15.22
Fertilizer	60.94	61.93	53.83	65.81
Crop chemicals	30.38	39.11	21.59	33.41
Crop insurance	15.93	13.64	14.03	19.26
Fuel & oil	12.66	13.43	12.03	10.78
Repairs	15.12	13.99	18.92	11.10
Custom hire	15.40	9.75	3.61	21.81
Operating interest	3.04	3.62	3.05	0.90
Total direct expenses per acre	168.74	169.49	141.47	178.37
Return over direct exp per acre	103.01	-30.89	86.65	161.27
<b>Overhead Expenses</b>				
Custom hire	0.27	1.98	0.25	0.01
Hired labor	7.56	2.68	1.94	9.42
Machinery leases	2.16	0.15	0.04	4.65
RE & pers. property taxes	2.92	3.13	2.98	2.61
Farm insurance	3.92	3.21	3.11	4.88
Utilities	2.64	1.87	4.24	2.55
Dues & professional fees	0.37	0.64	0.21	0.10
Interest	15.00	16.97	20.56	5.71
Mach & bldg depreciation	25.57	15.50	18.50	37.18
Miscellaneous	5.02	2.11	11.85	4.80
Total overhead expenses per acre	65.43	48.24	63.69	71.92
Total dir & ovhd expenses per acre	234.17	217.73	205.16	250.29
Net return per acre	37.58	-79.14	22.96	89.35
Government payments	-	-	-	-
Net return with govt pmts	37.58	-79.14	22.96	89.35
Labor & management charge	18.44	28.19	18.15	19.86
Net return over lbr & mgt	19.14	-107.32	4.81	69.49
<b>Cost of Production</b>				
Total direct expense per bu.	3.47	6.52	3.40	2.97
Total dir & ovhd exp per bu.	4.82	8.37	4.93	4.17
Less govt & other income	4.64	7.28	4.93	4.14
With labor & management	5.02	8.36	5.37	4.47
Net value per unit	5.42	4.23	5.49	5.62
Machinery cost per acre	71.85	57.79	56.42	83.92
Est. labor hours per acre	1.05	1.04	1.27	1.07

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**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 farms	36	7	7	8
Yield per acre (bu.)	48.20	41.46	50.64	54.37
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	5.29	4.57	5.07	6.09
Other product return per acre	0.27	1.26	-	-
Total product return per acre	255.30	190.92	256.57	331.21
Crop insurance per acre	1.83	0.89	2.48	3.25
Other crop income per acre	1.06	-	0.85	1.64
Gross return per acre	258.19	191.81	259.90	336.11
<b>Direct Expenses</b>				
Seed	16.07	13.69	16.88	18.96
Fertilizer	62.44	64.84	66.89	55.96
Crop chemicals	29.27	35.59	25.67	26.84
Crop insurance	14.19	15.29	15.58	15.56
Fuel & oil	11.96	12.28	14.24	10.04
Repairs	14.93	12.86	14.72	14.18
Custom hire	12.27	10.43	17.57	8.62
Hired labor	0.30	-	-	1.32
Land rent	38.91	38.17	39.75	40.16
Operating interest	4.25	5.85	2.36	5.45
Miscellaneous	0.43	0.41	0.99	0.52
Total direct expenses per acre	205.03	209.40	214.64	197.61
Return over direct exp per acre	53.17	-17.59	45.25	138.49
<b>Overhead Expenses</b>				
Custom hire	1.57	6.15	0.96	0.01
Hired labor	5.86	4.99	2.39	10.95
Machinery leases	3.62	6.04	0.55	5.29
Building leases	0.18	0.76	-	0.01
Farm insurance	3.11	3.36	2.55	3.64
Utilities	2.54	2.94	2.24	3.27
Dues & professional fees	0.47	0.26	0.26	1.00
Interest	3.52	5.45	2.20	4.41
Mach & bldg depreciation	17.84	16.41	21.46	17.58
Miscellaneous	3.56	2.95	2.76	4.07
Total overhead expenses per acre	42.26	49.31	35.36	50.22
Total dir & ovhd expenses per acre	247.29	258.71	250.01	247.83
Net return per acre	10.90	-66.90	9.89	88.27
Government payments	0.29	-	1.34	-
Net return with govt pmts	11.19	-66.90	11.22	88.27
Labor & management charge	17.16	18.74	17.26	15.86
Net return over lbr & mgt	-5.97	-85.64	-6.04	72.41
<b>Cost of Production</b>				
Total direct expense per bu.	4.25	5.05	4.24	3.63
Total dir & ovhd exp per bu.	5.13	6.24	4.94	4.56
Less govt & other income	5.06	6.19	4.84	4.47
With labor & management	5.41	6.64	5.19	4.76
Net value per unit	5.29	4.57	5.07	6.09
Machinery cost per acre	63.47	67.26	69.64	58.20
Est. labor hours per acre	0.92	0.83	0.81	1.05

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Wheat, Spring on Share Rent**

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	<u><b>Avg. Of All Farms</b></u>
Number of farms	9
Yield per acre (bu.)	52.39
Operators share of yield %	71.72
Value per bu.	5.08
Total product return per acre	190.73
Other crop income per acre	2.85
Gross return per acre	193.58
<b>Direct Expenses</b>	
Seed	13.83
Fertilizer	63.92
Crop chemicals	28.44
Crop insurance	10.23
Fuel & oil	8.75
Repairs	14.19
Custom hire	7.54
Operating interest	3.38
Total direct expenses per acre	150.30
Return over direct exp per acre	43.28
<b>Overhead Expenses</b>	
Hired labor	9.73
Machinery leases	5.87
Farm insurance	2.62
Utilities	1.39
Dues & professional fees	0.21
Interest	2.00
Mach & bldg depreciation	13.55
Miscellaneous	2.45
Total overhead expenses per acre	37.83
Total dir & ovhd expenses per acre	188.13
Net return per acre	5.45
Government payments	-
Net return with govt pmts	5.45
Labor & management charge	14.77
Net return over lbr & mgt	-9.33
<b>Cost of Production</b>	
Total direct expense per bu.	4.00
Total dir & ovhd exp per bu.	5.01
Less govt & other income	4.93
With labor & management	5.32
Net value per unit	5.08
Machinery cost per acre	50.24
Est. labor hours per acre	0.95

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Wheat, Winter on Cash Rent**

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	<u><b>Avg. Of All Farms</b></u>
Number of farms	7
Yield per acre (bu.)	45.39
Operators share of yield %	100.00
Value per bu.	5.74
Total product return per acre	260.62
Crop insurance per acre	0.21
Gross return per acre	260.83
<b>Direct Expenses</b>	
Seed	11.48
Fertilizer	58.77
Crop chemicals	27.54
Crop insurance	16.44
Fuel & oil	12.24
Repairs	9.52
Custom hire	18.08
Hired labor	2.11
Land rent	41.18
Operating interest	1.99
Miscellaneous	1.17
Total direct expenses per acre	200.52
Return over direct exp per acre	60.31
<b>Overhead Expenses</b>	
Hired labor	3.25
Machinery leases	5.26
Farm insurance	3.34
Utilities	3.05
Dues & professional fees	0.90
Interest	3.19
Mach & bldg depreciation	17.26
Miscellaneous	4.87
Total overhead expenses per acre	41.12
Total dir & ovhd expenses per acre	241.64
Net return per acre	19.19
Government payments	-
Net return with govt pmts	19.19
Labor & management charge	16.65
Net return over lbr & mgt	2.54
<b>Cost of Production</b>	
Total direct expense per bu.	4.42
Total dir & ovhd exp per bu.	5.32
Less govt & other income	5.32
With labor & management	5.69
Net value per unit	5.74
Machinery cost per acre	64.67
Est. labor hours per acre	1.08

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## EXPLANATORY NOTES FOR LIVESTOCK TABLES

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

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

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

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

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

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

**Livestock Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**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>	
Number of farms	30		6		6		6	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Beef Calves sold (lb)	48.93	129.31	39.12	96.46	38.71	101.03	49.71	138.85
Transferred out (lb)	51.07	138.31	60.88	149.48	61.29	155.18	50.29	144.49
Cull sales		49.09		44.30		49.80		59.79
Other income		0.30		-		-		-
Purchased		-26.60		-14.73		-24.59		-36.36
Transferred in		-12.62		-9.85		-6.00		-7.54
Inventory change		-6.82		-27.62		-16.72		3.02
Gross margin		271.12		238.04		259.54		302.23
<b>Direct Expenses</b>								
Protein Vit Minerals (lb.)	19.82	6.34	21.74	4.32	23.02	9.03	25.38	8.42
Aftermath Grazing (aum)	0.12	2.55	0.13	2.96	0.14	3.23	0.15	3.05
Corn Silage (lb.)	224.45	3.11	858.08	12.87	125.65	1.88	137.34	2.05
Hay, Alfalfa (lb.)	120.56	4.29	-	-	-	-	-	-
Hay, Grass (lb.)	1,168.40	32.22	1,395.92	42.25	1,100.95	31.57	1,215.38	31.15
Pasture (aum)	1.40	28.53	1.22	27.33	1.40	29.62	1.27	27.38
Other feed stuffs (lb)	35.60	2.06	14.21	0.53	1.13	0.80	52.08	1.20
Breeding fees		1.23		0.29		-		2.88
Veterinary		4.53		3.85		4.04		4.46
Supplies		2.80		4.86		0.98		1.65
Fuel & oil		6.92		5.87		6.92		5.89
Repairs		8.78		8.52		7.23		8.80
Marketing		1.38		1.16		1.18		1.96
Operating interest		2.52		3.03		3.79		1.75
Total direct expenses		107.26		117.85		100.27		100.62
Return over direct expense		163.86		120.19		159.28		201.61
<b>Overhead Expenses</b>								
Hired labor		2.48		4.33		0.30		2.30
Farm insurance		2.69		2.64		2.97		1.74
Utilities		2.25		3.25		1.60		2.33
Interest		3.04		4.29		3.57		2.32
Mach & bldg depreciation		8.36		8.51		11.18		4.72
Miscellaneous		4.16		6.35		3.71		2.75
Total overhead expenses		22.98		29.37		23.33		16.14
Total dir & ovhd expenses		130.24		147.21		123.60		116.76
Net return		140.88		90.83		135.94		185.47
Labor & management charge		18.14		21.03		16.07		18.21
Net return over lbr & mgt		122.75		69.80		119.88		167.26
<b>Cost of Production Per Cwt. Produced</b>								
Total direct expense per unit		107.26		117.85		100.27		100.62
Total dir & ovhd expense per unit		130.24		147.21		123.60		116.76
With other revenue adjustments		127.06		155.42		120.69		97.86
With labor and management		145.20		176.45		136.76		116.07
Est. labor hours per unit		1.11		1.16		0.96		1.25
<b>Other Information</b>								
Number of cows		143.4		108.7		131.3		155.2
Pregnancy percentage		95.3		93.9		95.2		96.1
Pregnancy loss percentage		4.6		7.1		4.4		1.9
Culling percentage		16.8		16.0		16.9		19.0
Calving percentage		90.9		87.2		91.0		94.3
Weaning percentage		86.5		83.3		84.3		90.8
Calves sold per cow		0.92		0.90		0.89		0.97
Calf death loss percent		5.2		3.6		7.0		4.6
Cow death loss percent		1.9		2.3		1.6		1.7
Average weaning weight		544		553		536		556
Lb. weaned/exposed female		471		461		452		505
Feed cost per cow		397.80		449.75		362.52		396.57
Avg wgt/ Beef Calves sold		555		583		532		557
Avg price / cwt.		264.28		246.55		260.99		279.30

**Livestock Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

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

	<b>Avg. Of All Farms</b>		<b>Low 20%</b>		<b>40 - 60%</b>		<b>High 20%</b>	
Number of farms	30		6		6		6	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Beef Calves sold (lb)	246.1	650.33	194.9	480.64	184.3	481.05	269.2	751.81
Transferred out (lb)	256.8	695.58	303.3	744.80	291.8	738.89	272.3	782.35
Cull sales		246.89		220.76		237.11		323.73
Other income		1.49		-		-		-
Purchased		-133.78		-73.39		-117.10		-196.90
Transferred in		-63.45		-49.08		-28.55		-40.82
Inventory change		-34.28		-137.64		-79.60		16.35
Gross margin		1,363.52		1,186.10		1,235.84		1,636.53
<b>Direct Expenses</b>								
Protein Vit Minerals (lb.)	99.7	31.90	108.3	21.52	109.6	42.98	137.4	45.57
Aftermath Grazing (aum)	0.6	12.82	0.7	14.74	0.7	15.38	0.8	16.51
Corn Silage (lb.)	1,128.8	15.66	4,275.6	64.13	598.3	8.97	743.7	11.08
Hay, Alfalfa (lb.)	606.3	21.55	-	-	-	-	-	-
Hay, Grass (lb.)	5,876.1	162.02	6,955.5	210.53	5,242.3	150.35	6,581.0	168.69
Pasture (aum)	7.0	143.50	6.1	136.20	6.7	141.05	6.9	148.25
Other feed stuffs (lb)	179.0	10.35	70.8	2.62	5.4	3.79	282.0	6.48
Breeding fees		6.19		1.43		-		15.58
Veterinary		22.78		19.21		19.25		24.16
Supplies		8.92		19.45		2.39		1.77
Fuel & oil		34.79		29.23		32.94		31.89
Repairs		44.15		42.44		34.42		47.65
Custom hire		5.14		4.78		2.26		7.16
Marketing		6.96		5.80		5.60		10.61
Operating interest		12.69		15.10		18.05		9.46
Total direct expenses		539.41		587.20		477.43		544.86
Return over direct expense		824.10		598.90		758.41		1,091.67
<b>Overhead Expenses</b>								
Hired labor		12.50		21.56		1.45		12.44
Farm insurance		13.51		13.18		14.12		9.40
Utilities		11.30		16.18		7.61		12.60
Interest		15.30		21.40		17.01		12.54
Mach & bldg depreciation		42.06		42.39		53.23		25.55
Miscellaneous		20.91		31.63		17.68		14.86
Total overhead expenses		115.57		146.33		111.10		87.39
Total dir & ovhd expenses		654.98		733.53		588.53		632.25
Net return		708.53		452.57		647.31		1,004.28
Labor & management charge		91.20		104.79		76.50		98.61
Net return over lbr & mgt		617.33		347.77		570.81		905.68
<b>Cost of Production Per Cwt. Produced</b>								
Total direct expense per unit		107.26		117.85		100.27		100.62
Total dir & ovhd expense per unit		130.24		147.21		123.60		116.76
With other revenue adjustments		127.06		155.42		120.69		97.86
With labor and management		145.20		176.45		136.76		116.07
Est. labor hours per unit		5.57		5.79		4.57		6.75
<b>Other Information</b>								
Number of cows		143.4		108.7		131.3		155.2
Pregnancy percentage		95.3		93.9		95.2		96.1
Pregnancy loss percentage		4.6		7.1		4.4		1.9
Culling percentage		16.8		16.0		16.9		19.0
Calving percentage		90.9		87.2		91.0		94.3
Weaning percentage		86.5		83.3		84.3		90.8
Calves sold per cow		0.92		0.90		0.89		0.97
Calf death loss percent		5.2		3.6		7.0		4.6
Cow death loss percent		1.9		2.3		1.6		1.7
Average weaning weight		544		553		536		556
Lb. weaned/exposed female		471		461		452		505
Feed cost per cow		397.80		449.75		362.52		396.57
Avg wgt/ Beef Calves sold		555		583		532		557
Avg price / cwt.		264.28		246.55		260.99		279.30

**Livestock Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

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

	<u>Avg. Of All Farms</u>	
Number of farms	8	
	Quantity	Value
Beef Calves sold (lb)	20.95	49.50
Transferred out (lb)	58.20	129.62
Cull sales		30.67
Other income		0.45
Purchased		-34.67
Transferred in		-36.80
Inventory change		79.47
Gross margin		218.24
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	15.65	3.77
Creep / Starter (lb.)	21.19	1.95
Corn (bu.)	1.29	4.23
Corn Silage (lb.)	471.79	7.62
Hay, Grass (lb.)	1,239.92	36.15
Pasture (aum)	1.03	23.09
Other feed stuffs (lb)	39.65	1.51
Veterinary		4.92
Supplies		1.93
Fuel & oil		7.39
Repairs		8.13
Custom hire		2.03
Marketing		2.29
Operating interest		2.05
Total direct expenses		107.06
Return over direct expense		111.18
<b>Overhead Expenses</b>		
Hired labor		2.57
Farm insurance		2.10
Utilities		1.54
Dues & professional fees		0.52
Interest		2.22
Mach & bldg depreciation		5.83
Miscellaneous		1.81
Total overhead expenses		16.61
Total dir & ovhd expenses		123.67
Net return		94.58
Labor & management charge		11.35
Net return over lbr & mgt		83.23
<b>Cost of Production Per Cwt. Produced</b>		
Total direct expense per unit		107.06
Total dir & ovhd expense per unit		123.67
With other revenue adjustments		136.81
With labor and management		148.16
Est. labor hours per unit		0.91
<b>Other Information</b>		
Number of cows		165.1
Pregnancy percentage		97.5
Pregnancy loss percentage		1.3
Culling percentage		12.3
Calving percentage		96.3
Weaning percentage		91.4
Calves sold per cow		0.74
Calf death loss percent		6.1
Cow death loss percent		1.6
Average weaning weight		526
Lb. weaned/exposed female		481
Feed cost per cow		490.09
Avg wgt/ Beef Calves sold		633
Avg price / cwt.		236.34



**Livestock Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

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

	<u>Avg. Of All Farms</u>	
Number of farms	8	
	Quantity	Value
Beef Calves sold (lb)	131.1	309.78
Transferred out (lb)	364.2	811.13
Cull sales		191.89
Other income		2.80
Purchased		-216.95
Transferred in		-230.28
Inventory change		497.32
Gross margin		1,365.69
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	98.0	23.58
Creep / Starter (lb.)	132.6	12.21
Corn (bu.)	8.1	26.45
Corn Silage (lb.)	2,952.3	47.69
Hay, Grass (lb.)	7,759.0	226.20
Pasture (aum)	6.5	144.50
Other feed stuffs (lb)	248.1	9.46
Veterinary		30.81
Supplies		12.10
Fuel & oil		46.23
Repairs		50.89
Custom hire		12.70
Marketing		14.33
Operating interest		12.81
Total direct expenses		669.96
Return over direct expense		695.73
<b>Overhead Expenses</b>		
Hired labor		16.10
Farm insurance		13.17
Utilities		9.65
Dues & professional fees		3.28
Interest		13.89
Mach & bldg depreciation		36.50
Miscellaneous		11.32
Total overhead expenses		103.91
Total dir & ovhd expenses		773.88
Net return		591.82
Labor & management charge		71.00
Net return over lbr & mgt		520.81
<b>Cost of Production Per Cwt. Produced</b>		
Total direct expense per unit		107.06
Total dir & ovhd expense per unit		123.67
With other revenue adjustments		136.81
With labor and management		148.16
Est. labor hours per unit		5.69
<b>Other Information</b>		
Number of cows		165.1
Pregnancy percentage		97.5
Pregnancy loss percentage		1.3
Culling percentage		12.3
Calving percentage		96.3
Weaning percentage		91.4
Calves sold per cow		0.74
Calf death loss percent		6.1
Cow death loss percent		1.6
Average weaning weight		526
Lb. weaned/exposed female		481
Feed cost per cow		490.09
Avg wgt/ Beef Calves sold		633
Avg price / cwt.		236.34

**Livestock Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Beef Cow-Calf (Shares) -- Average Per Cwt. Produced**

	<u>Avg. Of All Farms</u>	
Number of farms	8	
	Quantity	Value
Beef Calves sold (lb)	29.54	76.55
Transferred out (lb)	70.46	180.29
Cull sales		20.74
Other income		-
Transferred in		-59.30
Inventory change		17.70
Gross margin		235.98
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	13.72	5.72
Aftermath Grazing (aum)	0.10	2.16
Hay, Grass (lb.)	1,299.55	39.83
Pasture (aum)	1.37	29.63
Other feed stuffs (lb)	127.28	4.33
Veterinary		4.02
Supplies		0.95
Fuel & oil		6.58
Repairs		8.63
Custom hire		0.89
Livestock leases		77.96
Marketing		1.16
Operating interest		2.67
Total direct expenses		184.53
Return over direct expense		51.46
<b>Overhead Expenses</b>		
Hired labor		3.35
Farm insurance		1.86
Utilities		2.26
Interest		2.52
Mach & bldg depreciation		7.59
Miscellaneous		3.03
Total overhead expenses		20.60
Total dir & ovhd expenses		205.13
Net return		30.86
Labor & management charge		10.09
Net return over lbr & mgt		20.76
<b>Cost of Production Per Cwt. Produced</b>		
Total direct expense per unit		184.53
Total dir & ovhd expense per unit		205.13
With other revenue adjustments		225.99
With labor and management		236.08
Est. labor hours per unit		0.96
<b>Other Information</b>		
Number of cows		69.1
Pregnancy percentage		98.6
Pregnancy loss percentage		0.5
Culling percentage		9.8
Calving percentage		98.0
Weaning percentage		92.0
Calves sold per cow		0.99
Calf death loss percent		7.4
Cow death loss percent		0.7
Average weaning weight		508
Lb. weaned/exposed female		467
Feed cost per cow		410.86
Avg wgt/ Beef Calves sold		504
Avg price / cwt.		259.13

**Livestock Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Beef Cow-Calf (Shares) -- Average Per Cow**

	<u>Avg. Of All Farms</u>	
Number of farms	8	
	Quantity	Value
Beef Calves sold (lb)	148.6	385.16
Transferred out (lb)	354.5	907.11
Cull sales		104.35
Other income		-
Transferred in		-298.37
Inventory change		89.06
Gross margin		1,187.30
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	69.0	28.76
Aftermath Grazing (aum)	0.5	10.89
Hay, Grass (lb.)	6,538.4	200.38
Pasture (aum)	6.9	149.07
Other feed stuffs (lb)	640.4	21.76
Veterinary		20.24
Supplies		4.78
Fuel & oil		33.10
Repairs		43.40
Custom hire		4.48
Livestock leases		392.24
Marketing		5.86
Operating interest		13.45
Total direct expenses		928.40
Return over direct expense		258.90
<b>Overhead Expenses</b>		
Hired labor		16.83
Farm insurance		9.35
Utilities		11.35
Interest		12.66
Mach & bldg depreciation		38.19
Miscellaneous		15.27
Total overhead expenses		103.65
Total dir & ovhd expenses		1,032.05
Net return		155.25
Labor & management charge		50.78
Net return over lbr & mgt		104.47
<b>Cost of Production Per Cwt. Produced</b>		
Total direct expense per unit		184.53
Total dir & ovhd expense per unit		205.13
With other revenue adjustments		225.99
With labor and management		236.08
Est. labor hours per unit		4.82
<b>Other Information</b>		
Number of cows		69.1
Pregnancy percentage		98.6
Pregnancy loss percentage		0.5
Culling percentage		9.8
Calving percentage		98.0
Weaning percentage		92.0
Calves sold per cow		0.99
Calf death loss percent		7.4
Cow death loss percent		0.7
Average weaning weight		508
Lb. weaned/exposed female		467
Feed cost per cow		410.86
Avg wgt/ Beef Calves sold		504
Avg price / cwt.		259.13

**Livestock Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

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

	<u>Avg. Of All Farms</u>	
Number of farms	23	
	Quantity	Value
Beef Replace sold (hd)	0.1	178.79
Transferred out (hd)	0.9	1,770.12
Cull sales (hd)	0.0	45.92
Other income		-
Purchased (hd)	0.1	-147.74
Transferred in (hd)	0.3	-361.17
Inventory change (hd)	-0.6	-621.44
Gross margin		864.47
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	60.3	24.07
Complete Ration (lb.)	51.6	7.34
Aftermath Grazing (aum)	0.3	6.22
Corn (bu.)	8.8	32.23
Corn Silage (lb.)	963.6	15.59
Hay, Grass (lb.)	2,513.3	68.10
Oats (bu.)	1.2	3.53
Pasture (aum)	3.8	82.58
Other feed stuffs (lb)	393.2	12.84
Veterinary		12.61
Supplies		2.51
Fuel & oil		9.65
Repairs		10.92
Custom hire		6.16
Operating interest		3.26
Total direct expenses		297.63
Return over direct expense		566.85
<b>Overhead Expenses</b>		
Hired labor		3.35
Interest		4.13
Mach & bldg depreciation		11.17
Miscellaneous		12.27
Total overhead expenses		30.92
Total dir & ovhd expenses		328.54
Net return		535.93
Labor & management charge		23.03
Net return over lbr & mgt		512.90
Est. labor hours per unit		1.61
<b>Other Information</b>		
No. purchased or trans in		14
Number sold or trans out		33
Average number of head		27
Percentage death loss		0.7
Feed cost/head sold/trans		252.51

**Livestock Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
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**(Farms Sorted By Return to Overhead)**

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

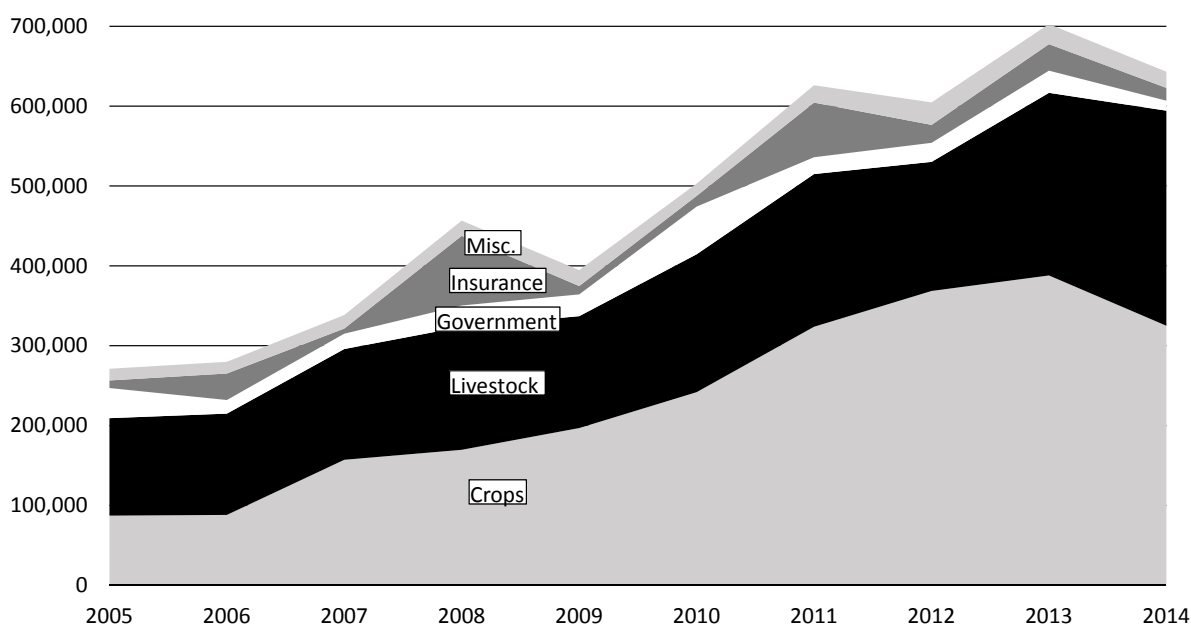
	<u>Avg. Of All Farms</u>	
Number of farms	10	
	Quantity	Value
Backgnd Beef sold (lb)	364.82	759.17
Transferred out (lb)	82.49	181.52
Other income		8.81
Transferred in (lb)	-315.45	-829.05
Inventory change (lb)	-34.70	-31.58
Gross margin		88.87
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	20.18	5.63
Complete Ration (lb.)	373.47	5.56
Aftermath Grazing (aum)	0.14	2.57
Barley (bu.)	1.96	4.85
Corn (bu.)	6.91	21.21
Corn Silage (lb.)	404.21	8.86
Hay, Alfalfa (lb.)	117.99	3.54
Hay, Grass (lb.)	533.37	17.36
Oats (bu.)	0.80	1.99
Other feed stuffs (lb)	34.56	2.43
Veterinary		2.33
Fuel & oil		3.92
Repairs		4.97
Custom hire		0.63
Marketing		3.90
Operating interest		2.09
Total direct expenses		91.83
Return over direct expense		-2.96
<b>Overhead Expenses</b>		
Hired labor		2.33
Farm insurance		1.16
Utilities		0.88
Interest		1.98
Mach & bldg depreciation		4.03
Miscellaneous		2.37
Total overhead expenses		12.74
Total dir & ovhd expenses		104.57
Net return		-15.70
Labor & management charge		10.20
Net return over lbr & mgt		-25.90
<b>Cost of Production Per Cwt. Produced</b>		
Total direct expense per unit		211.66
Total dir & ovhd expense per unit		214.51
With other revenue adjustments		213.81
With labor and management		216.09
Est. labor hours per unit		0.65
<b>Other Information</b>		
No. purchased or trans in		73
Number sold or trans out		79
Percentage death loss		0.6
Avg. daily gain (lb.)		1.80
Lb. of conc / lb. of gain		9.35
Lb. of feed / lb. of gain		17.21
Feed cost per cwt. of gain		73.99
Feed cost per head		108.57
Avg wgt / Backgnd Beef sold		717
Avg sales price / cwt.		208.09

**Livestock Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

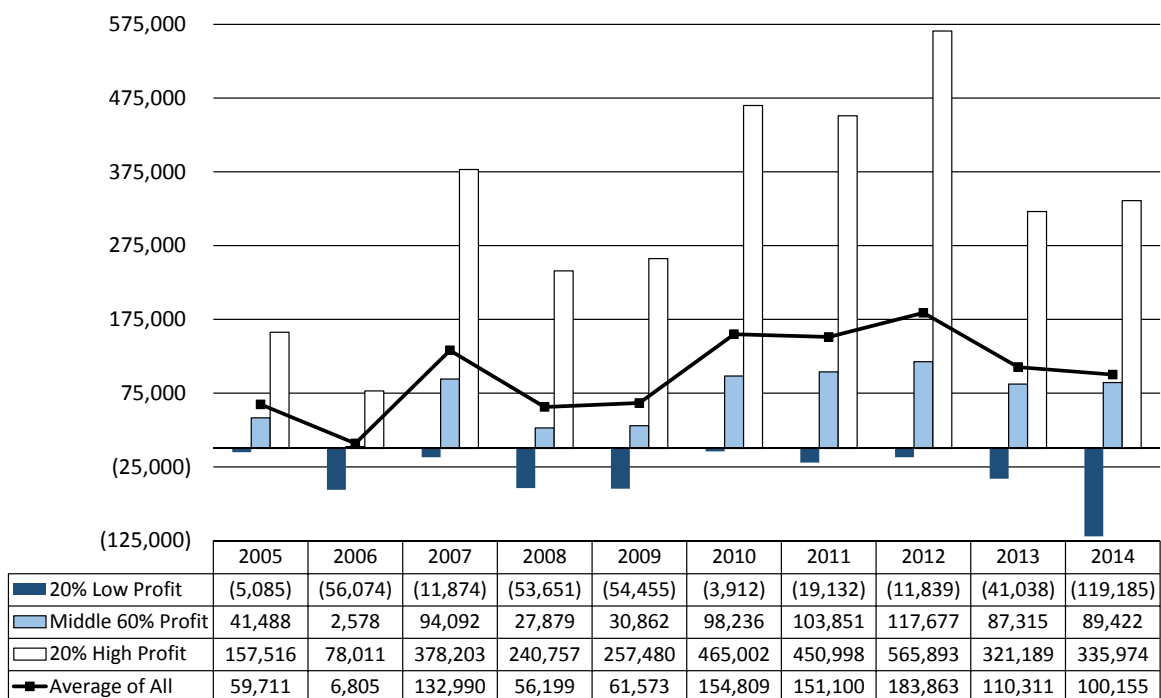
**Beef Backgrounding -- Average Per Head**

	<u>Avg. Of All Farms</u>	
Number of farms	10	
	Quantity	Value
Backgnd Beef sold (lb)	535.4	1,114.06
Transferred out (lb)	121.1	266.37
Other income		12.93
Transferred in (lb)	-462.9	-1,216.60
Inventory change (lb)	-50.9	-46.34
Gross margin		130.42
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	29.6	8.26
Complete Ration (lb.)	548.1	8.15
Aftermath Grazing (aum)	0.2	3.77
Barley (bu.)	2.9	7.11
Corn (bu.)	10.1	31.12
Corn Silage (lb.)	593.2	13.01
Hay, Alfalfa (lb.)	173.1	5.19
Hay, Grass (lb.)	782.7	25.48
Oats (bu.)	1.2	2.92
Other feed stuffs (lb)	50.7	3.56
Veterinary		3.42
Fuel & oil		5.76
Repairs		7.30
Custom hire		0.92
Marketing		5.72
Operating interest		3.07
Total direct expenses		134.76
Return over direct expense		-4.34
<b>Overhead Expenses</b>		
Custom hire		0.56
Hired labor		3.41
Farm insurance		1.70
Utilities		1.29
Interest		2.91
Mach & bldg depreciation		5.91
Miscellaneous		2.92
Total overhead expenses		18.70
Total dir & ovhd expenses		153.46
Net return		-23.04
Labor & management charge		14.97
Net return over lbr & mgt		-38.01
<b>Cost of Production Per Cwt. Produced</b>		
Total direct expense per unit		211.66
Total dir & ovhd expense per unit		214.51
With other revenue adjustments		213.81
With labor and management		216.09
Est. labor hours per unit		0.96
<b>Other Information</b>		
No. purchased or trans in		73
Number sold or trans out		79
Percentage death loss		0.6
Avg. daily gain (lb.)		1.80
Lb. of conc / lb. of gain		9.35
Lb. of feed / lb. of gain		17.21
Feed cost per cwt. of gain		73.99
Feed cost per head		108.57
Avg wgt / Backgnd Beef sold		717
Avg sales price / cwt.		208.09

**Figure 1. Gross Cash Income Per Farm**  
N.D. Farm Business Management Education Program – West Region

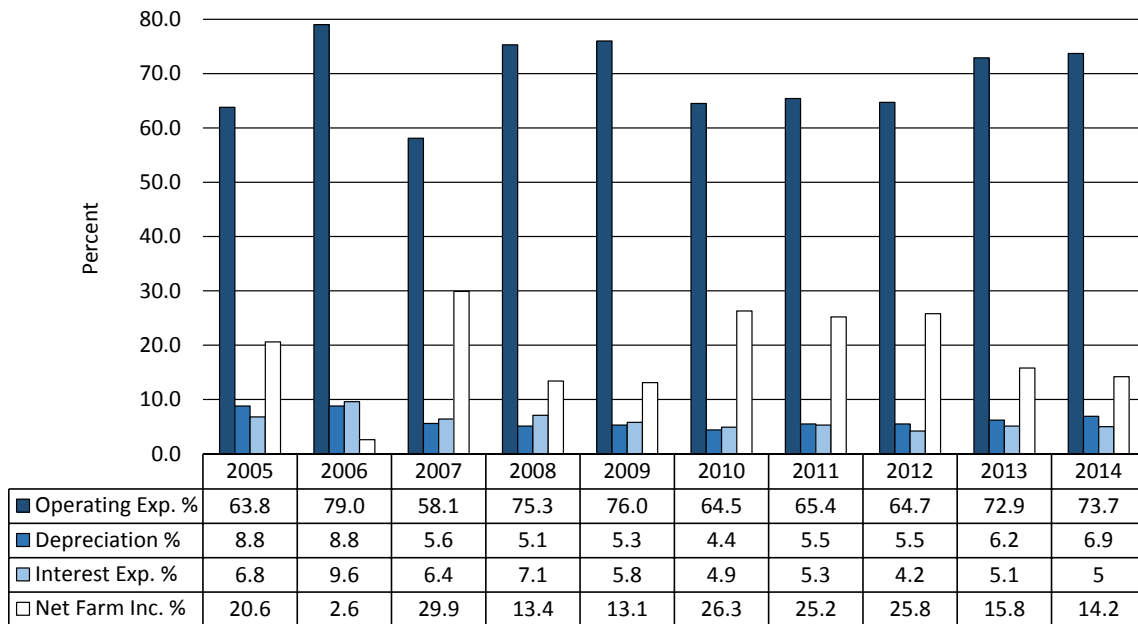


**Figure 2. Net Farm Income (Accrual) Per Farm**  
N.D. Farm Business Management Education Program – West Region



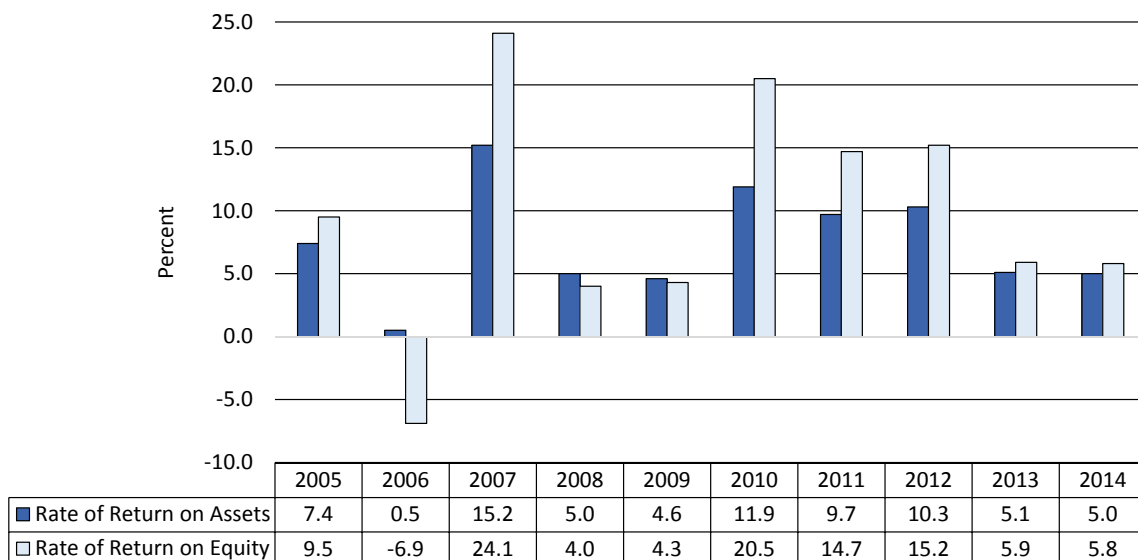
### Figure 3. Financial Efficiency Measures (As Percent of Gross Revenue)

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



### Figure 4. Profitability Measures Per Farm

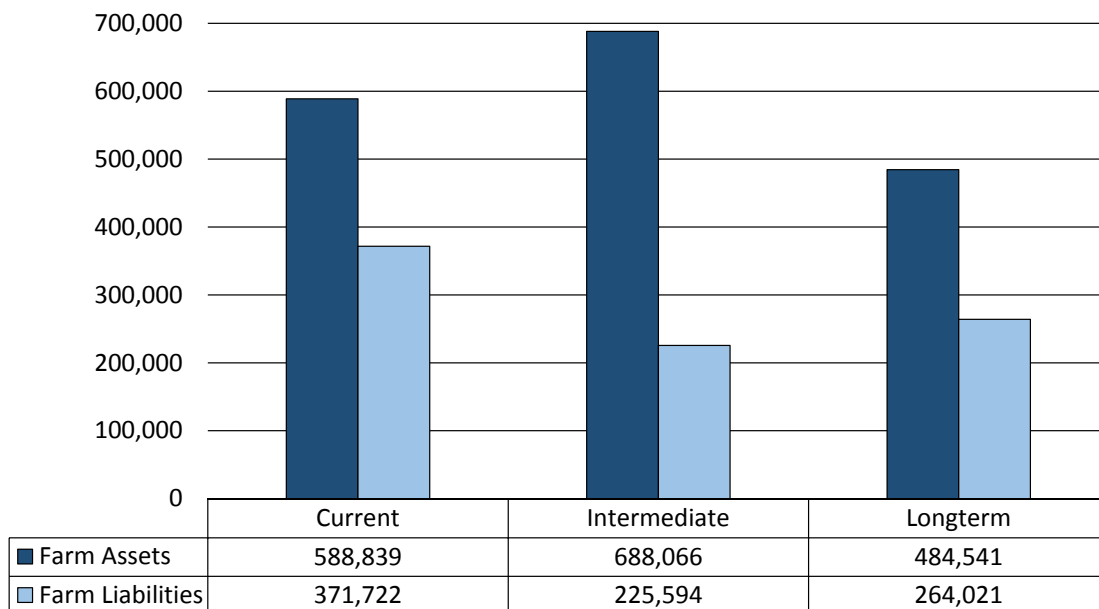
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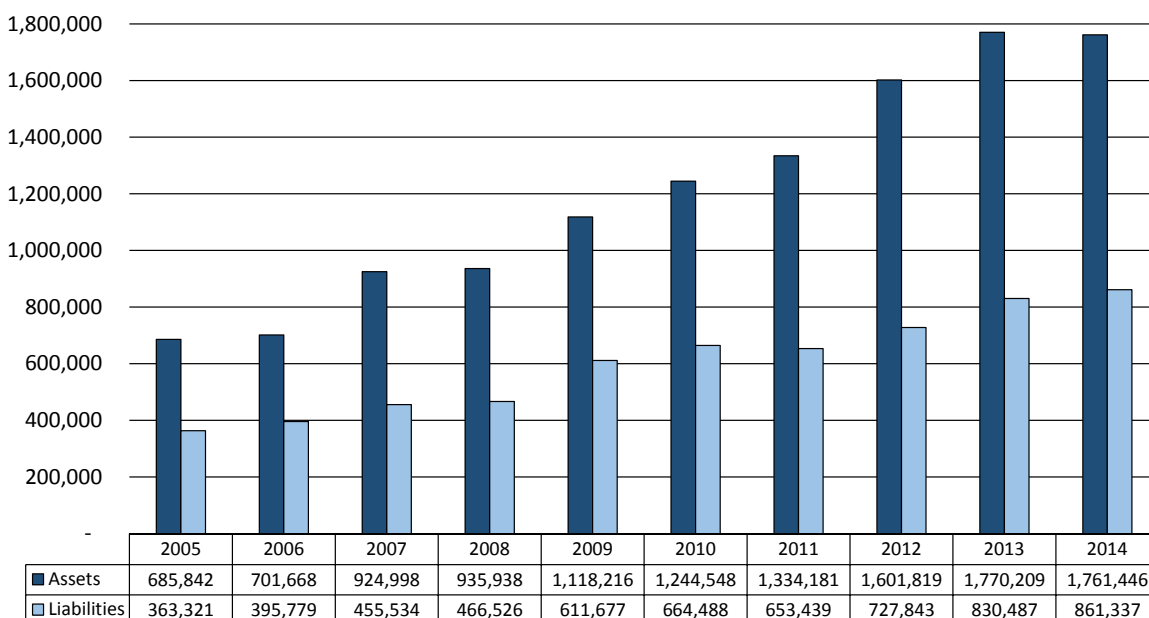
## Figure 5. Assets and Liabilities Per Farm, 2014

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



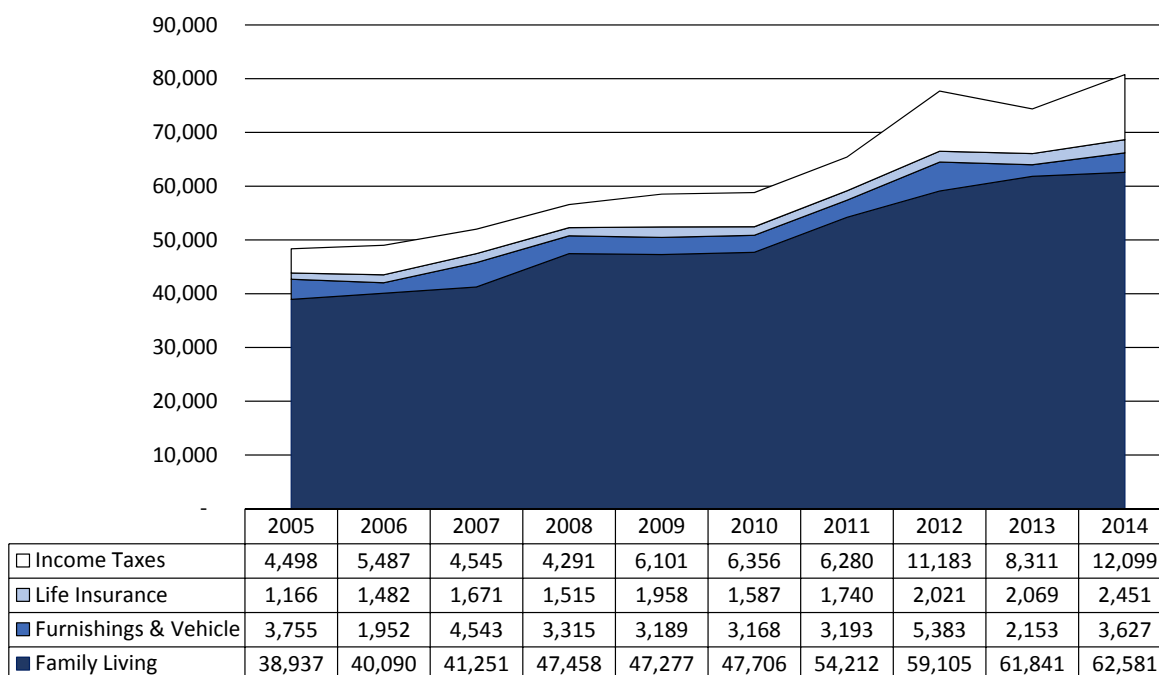
## Figure 6. Total Farm Assets and Liabilities

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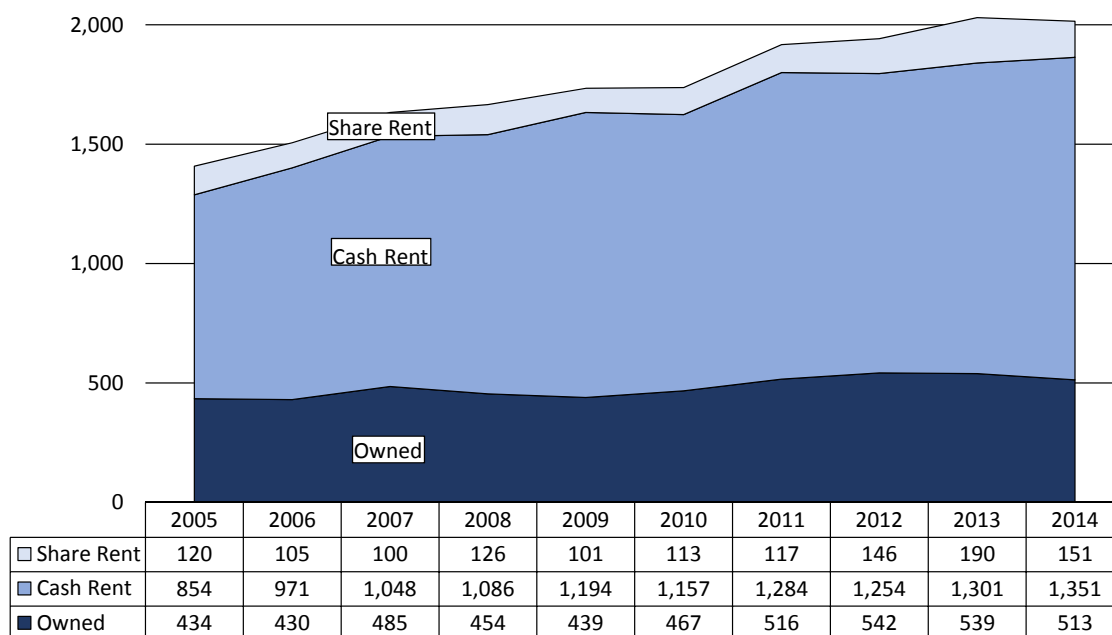
## Figure 7. Household and Personal Expenses

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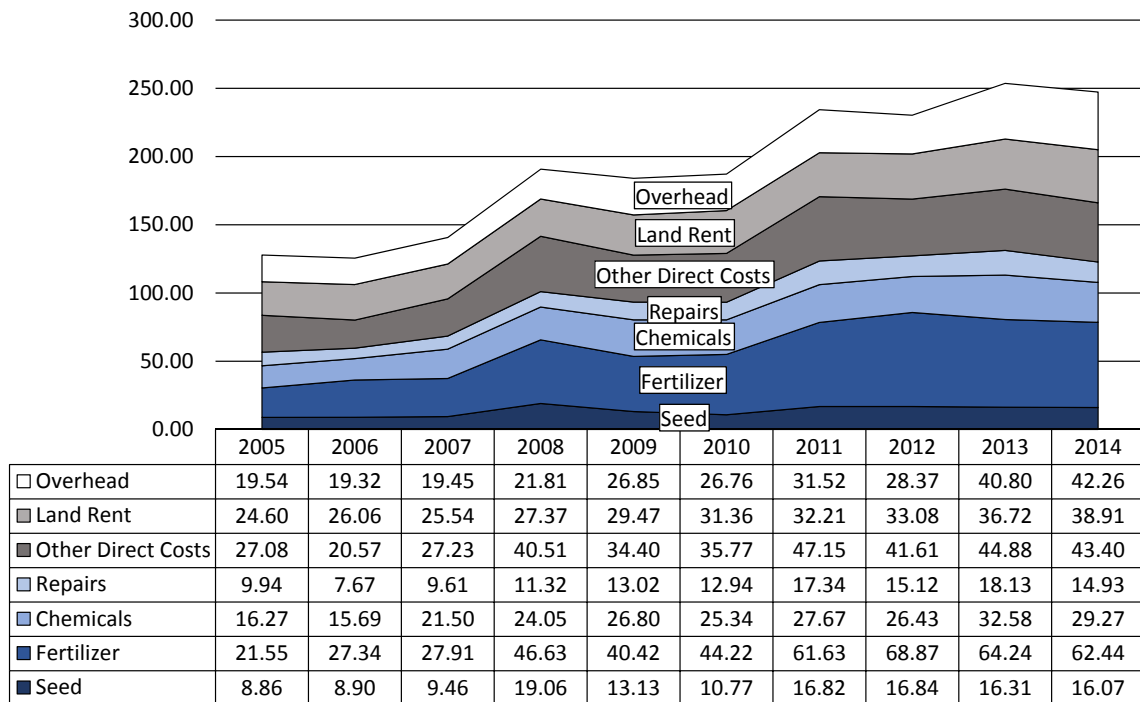
## Figure 8. Crop Acreage Per Farm

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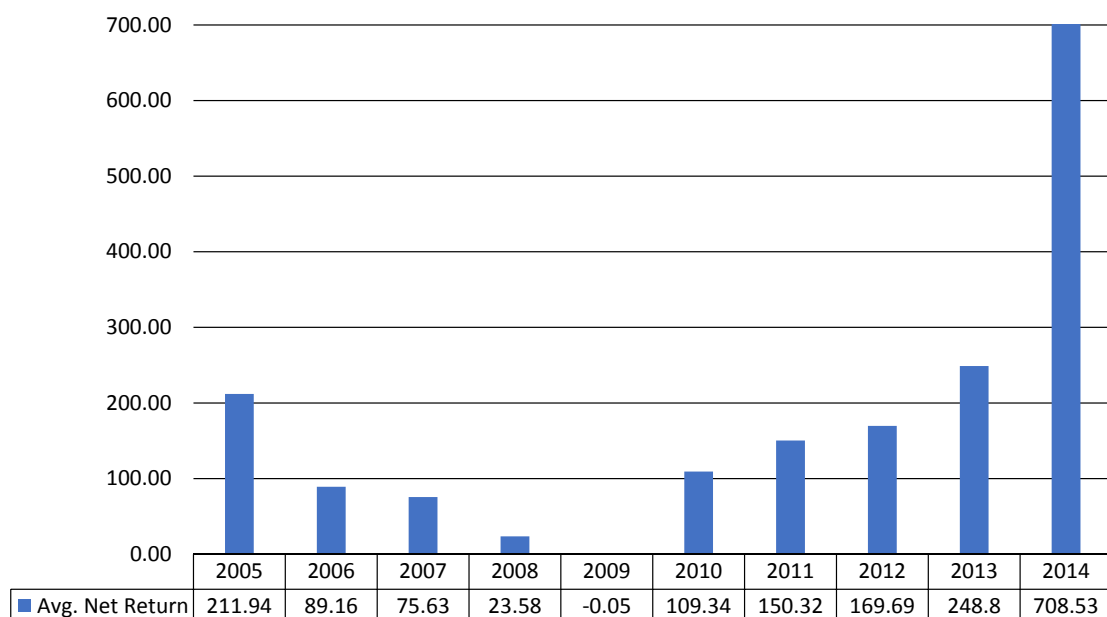
## Figure 9. Spring Wheat Costs Per Acre

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## Figure 10. Average Net Return Per Beef Cow

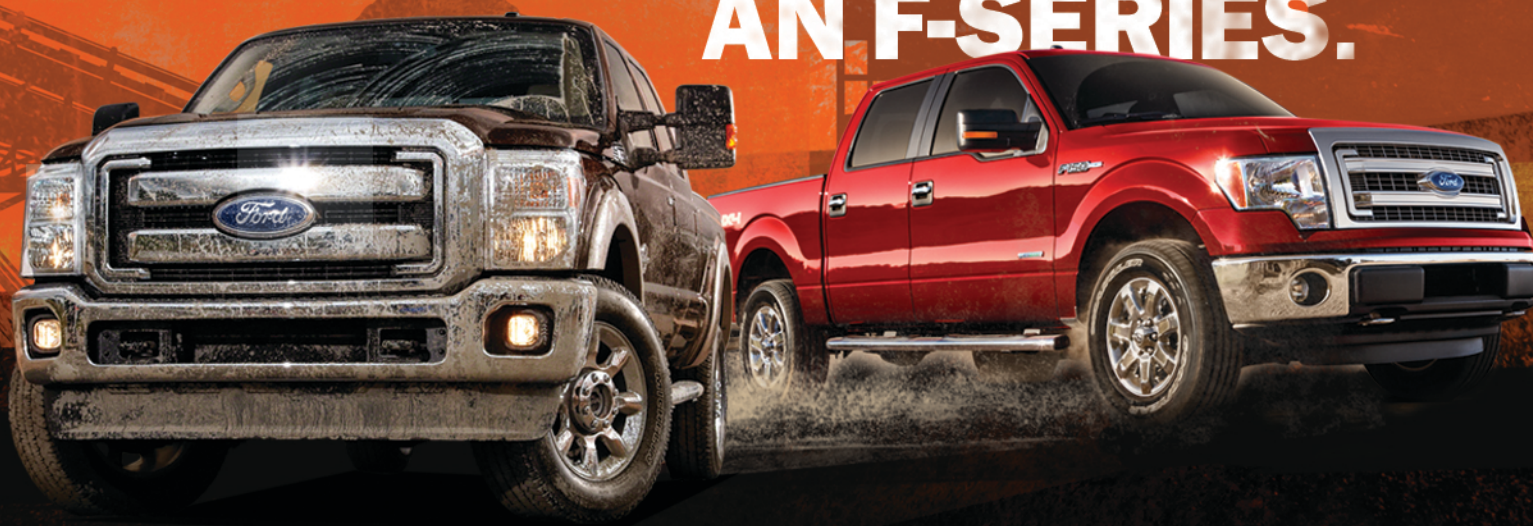
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