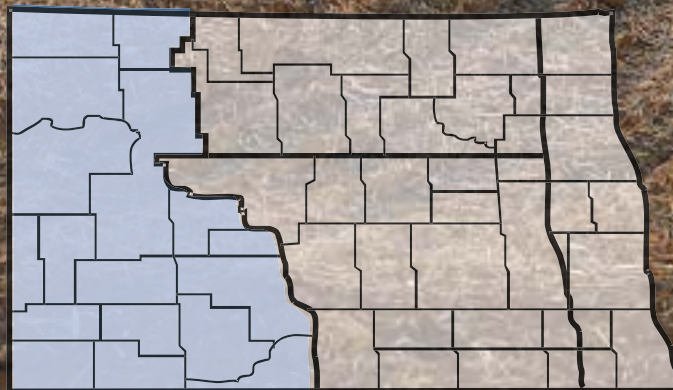


# 2016 ANNUAL REPORT

## Western North Dakota

North Dakota Farm and Ranch Business  
Management Education



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





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and Technical Education

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# NORTH DAKOTA FARM BUSINESS MANAGEMENT EDUCATION

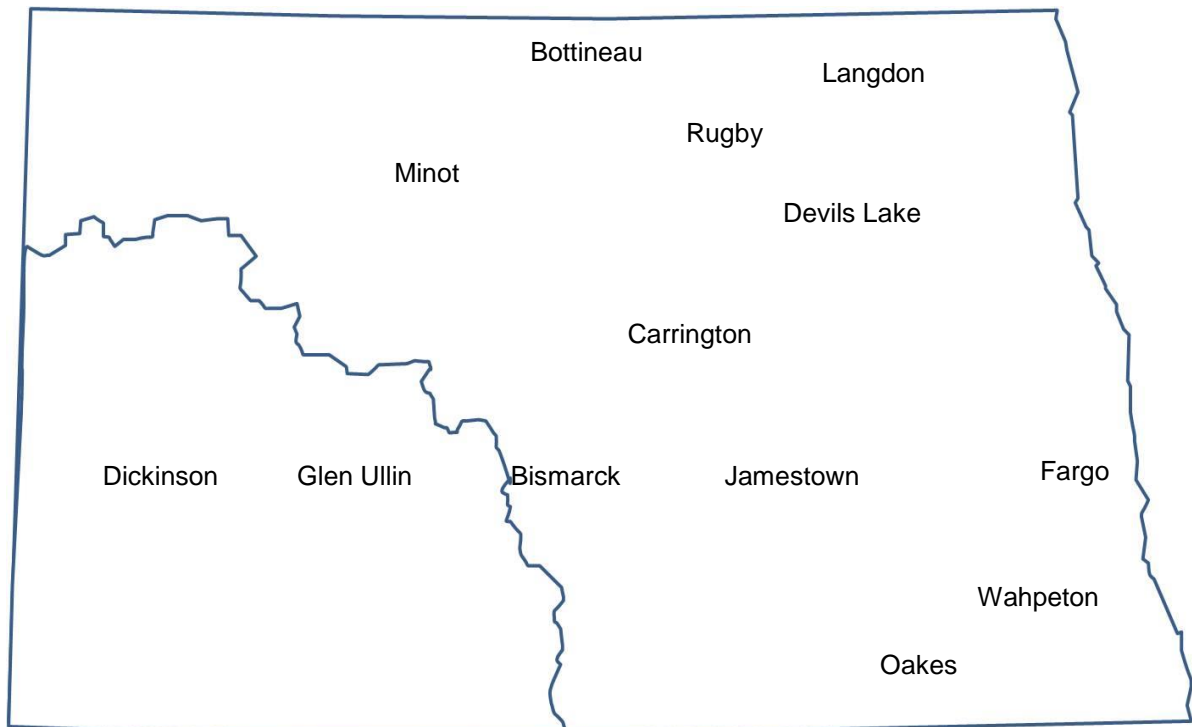
## REGION 4 – WESTERN NORTH DAKOTA 2016 ANNUAL REPORT

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
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Glen Ullin High School.....	Donald Hagen

This report was made possible by the farm families who cooperated with their farm management instructors in getting the records for 2016 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



## 2016 Western North Dakota Report North Dakota Farm Business Management Education

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## INTRODUCTION

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

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

The 2016 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 28th 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, 2016**  
**(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	70	14	14	14
<b>Cash Farm Income</b>				
Barley	8,474	5,851	634	19,910
Beans, Garbonzo	4,246	5,099	-	16,130
Beans, Pinto	3,257	-	-	14,416
Canola	9,065	-	-	33,030
Corn	49,328	34,123	9,315	127,572
Corn Silage	986	-	-	4,931
Flax	3,500	4,568	2,807	3,397
Hay, Alfalfa	426	499	1,542	-
Hay, Mixed	591	550	-	2,403
Hay, Mixed Alfalfa/Grass	1,771	-	5,520	-
Hay, Small Grain	727	471	-	2,340
Lentils	13,209	-	-	66,045
Oats	178	250	-	-
Peas, Field	9,408	733	5,859	31,244
Radishes	443	-	-	2,214
Rye	436	-	-	2,179
Rye Silage	914	-	-	4,568
Safflower	976	-	-	4,880
Soybeans	24,297	463	3,898	87,109
Sunflowers	51,451	54,494	17,873	102,471
Wheat, Durum	21,214	12,446	2,425	77,582
Wheat, Spring	95,237	90,178	38,815	209,546
Wheat, Winter	1,573	1,627	-	6,240
Rented Out	680	-	-	1,815
Miscellaneous crop income	50	-	-	-
Beef Bulls	8,857	-	8,353	-
Beef Cow-Calf, Beef Calves	30,665	49,978	27,143	35,984
Beef Replacement Heifers	5,832	-	9,092	-
Beef Backgrounding	67,779	86,704	66,825	103,811
Beef Finish Yearlings	5,369	-	-	26,847
Dairy, Milk	63,996	44,646	-	-
Dairy, Dairy Calves	762	1,867	-	-
Dairy Replacement Heifers	319	-	-	-
Beef Finish Cull Cows	320	-	-	-
Dairy Backgrounding	1,730	-	-	-
Cull breeding livestock	17,987	20,051	9,748	19,803
Misc. livestock income	5,485	18,540	-	6,289
Crop government payments	14,732	9,011	5,176	38,458
CRP payments	35	8	138	20
Other government payments	4,117	-	4,813	6,252
Custom work income	7,078	8,029	341	18,054
Patronage dividends, cash	4,530	4,498	753	9,348
Crop insurance income	46,363	36,395	7,384	165,982
Property insurance income	6,453	5,081	171	8,606
Sale of resale items	45	223	-	-
Other farm income	12,052	7,979	6,607	13,824
<b>Gross Cash Farm Income</b>	<b>606,942</b>	<b>504,361</b>	<b>235,232</b>	<b>1,273,296</b>

**Farm Income Statement (continued)**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2016**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of</u> <u>All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	70	14	14	14
<b>Cash Farm Expense</b>				
Seed	42,169	36,146	11,033	114,920
Fertilizer	64,077	61,926	22,291	149,768
Crop chemicals	51,485	33,282	14,573	135,540
Crop insurance	21,675	17,748	9,645	63,137
Storage	455	622	341	1,311
Irrigation energy	546	-	-	1,018
Crop marketing	365	838	-	584
Crop miscellaneous	2,424	1,547	782	4,602
Consultants	54	-	268	-
Feeder livestock purchase	26,568	4,524	10,215	111,278
Purchased feed	45,970	30,658	12,689	34,822
Breeding fees	554	109	109	-
Veterinary	8,131	7,669	4,603	5,584
Supplies	3,660	3,281	2,236	595
Livestock leases	779	89	1,539	-
Grazing fees	44	85	135	-
Livestock marketing	4,698	2,070	1,124	1,223
Interest	34,118	38,339	14,943	62,757
Fuel & oil	20,052	18,920	12,426	36,556
Repairs	39,406	52,401	19,153	64,800
Custom hire	28,111	33,132	3,614	75,793
Hired labor	23,042	16,540	2,414	36,390
Land rent	68,977	66,300	34,853	161,461
Machinery leases	5,754	3,940	2,915	11,255
Building leases	451	1,340	-	607
Real estate taxes	2,993	3,120	1,100	3,995
Farm insurance	9,599	8,004	4,825	16,408
Utilities	8,964	7,996	3,137	11,724
Dues & professional fees	1,994	3,607	1,483	1,619
Miscellaneous	9,323	8,840	6,123	9,384
Total cash expense	526,437	463,072	198,567	1,117,133
Net cash farm income	80,506	41,290	36,666	156,163
<b>Inventory Changes</b>				
Prepays and supplies	-2,443	6,677	-911	-5,099
Accounts receivable	-7,588	-25,241	-8,410	2,069
Hedging accounts	-2,064	-2,019	-370	-7,929
Other current assets	-3,428	1,637	424	2,292
Crops and feed	49,738	-13,543	12,392	204,846
Market livestock	-847	-11,419	-11,127	33,458
Breeding livestock	-4,075	-23,627	3,813	10,099
Other assets	1,182	-1,772	841	2,801
Accounts payable	8,675	3,857	8,445	3,605
Accrued interest	-4,011	-12,962	-1,291	-2,470
Total inventory change	35,139	-78,414	3,806	243,673
Net operating profit	115,644	-37,124	40,471	399,837
<b>Depreciation</b>				
Machinery and equipment	-41,218	-34,468	-11,608	-97,174
Titled vehicles	-6,570	-5,384	-2,878	-11,537
Buildings and improvements	-6,003	-3,571	-1,225	-8,801
Total depreciation	-53,791	-43,423	-15,710	-117,512
Net farm income from operations	61,853	-80,547	24,761	282,325
Gain or loss on capital sales	28	-	141	-
Net farm income	61,881	-80,547	24,902	282,325

**Inventory Changes**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2016**  
**(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	70	14	14	14
Net cash farm income	80,506	41,290	36,666	156,163
<b>Crops and Feed</b>				
Ending inventory	333,631	257,210	126,978	868,370
Beginning inventory	283,893	270,753	114,585	663,524
Inventory change	49,738	-13,543	12,392	204,846
<b>Market Livestock</b>				
Ending inventory	98,134	130,575	74,127	141,277
Beginning inventory	98,982	141,995	85,254	107,819
Inventory change	-847	-11,419	-11,127	33,458
<b>Accts Receivable</b>				
Ending inventory	25,810	17,770	1,261	81,947
Beginning inventory	33,398	43,012	9,671	79,878
Inventory change	-7,588	-25,241	-8,410	2,069
<b>Prepaid Expenses and Supplies</b>				
Ending inventory	28,065	16,968	3,368	93,287
Beginning inventory	30,508	10,291	4,279	98,387
Inventory change	-2,443	6,677	-911	-5,099
<b>Hedging Activities</b>				
Ending inventory	181	904	-	-
Withdrawals	11	-	56	-
Beginning inventory	2,170	2,923	-	7,929
Deposits	85	-	426	-
Gain or loss	-2,064	-2,019	-370	-7,929
<b>Other Current Assets</b>				
Ending inventory	2,101	1,637	424	8,209
Beginning inventory	5,528	-	-	5,917
Inventory change	-3,428	1,637	424	2,292
<b>Breeding Livestock</b>				
Ending inventory	182,037	211,992	154,101	166,177
Capital sales	5,763	8,700	9,197	2,999
Beginning inventory	171,395	219,798	130,523	144,063
Capital purchases	20,480	24,521	28,962	15,013
Depreciation, capital adjust	-4,075	-23,627	3,813	10,099
<b>Other Capital Assets</b>				
Ending inventory	25,625	39,112	6,496	52,627
Capital sales	568	-	-	2,839
Beginning inventory	24,522	40,884	5,655	50,436
Capital purchases	489	-	-	2,229
Depreciation, capital adjust	1,182	-1,772	841	2,801
<b>Accounts Payable</b>				
Beginning inventory	24,701	16,489	25,921	25,183
Ending inventory	16,026	12,632	17,475	21,577
Inventory change	8,675	3,857	8,445	3,605
<b>Accrued Interest</b>				
Beginning inventory	13,570	19,085	4,729	27,072
Ending inventory	17,581	32,047	6,019	29,541
Inventory change	-4,011	-12,962	-1,291	-2,470
Total inventory change	35,139	-78,414	3,806	243,673
Net operating profit	115,644	-37,124	40,471	399,837

**Depreciation**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2016**  
**(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	70	14	14	14
Net operating profit	115,644	-37,124	40,471	399,837
<b>Machinery and Equipment</b>				
Ending inventory	433,613	371,341	131,491	981,084
Capital sales	3,571	3,000	250	7,727
Beginning inventory	435,137	369,651	136,945	970,911
Capital purchases	43,265	39,158	6,404	115,074
Depreciation, capital adjust.	-41,218	-34,468	-11,608	-97,174
<b>Titled Vehicles</b>				
Ending inventory	62,699	50,530	24,940	120,062
Capital sales	616	786	-	174
Beginning inventory	64,567	51,759	23,907	125,397
Capital purchases	5,318	4,941	3,911	6,376
Depreciation, capital adjust.	-6,570	-5,384	-2,878	-11,537
<b>Buildings and Improvements</b>				
Ending inventory	146,599	107,971	28,957	210,622
Capital sales	643	-	3,214	-
Beginning inventory	146,856	106,335	31,839	200,102
Capital purchases	6,389	5,207	1,557	19,321
Depreciation, capital adjust.	-6,003	-3,571	-1,225	-8,801
Total depreciation, capital adj.	-53,791	-43,423	-15,710	-117,512
Net farm income from operations	61,853	-80,547	24,761	282,325
Gain or loss on capital sales	28	-	141	-
Net farm income	61,881	-80,547	24,902	282,325



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**Profitability Measures**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2016**  
**(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	70	14	14	14
<b>Profitability (assets valued at cost)</b>				
Net farm income from operations	61,853	-80,547	24,761	282,325
Rate of return on assets	3.3 %	-4.3 %	1.8 %	8.6 %
Rate of return on equity	2.2 %	-24.4 %	-1.1 %	13.0 %
Operating profit margin	10.0 %	-17.4 %	6.1 %	19.8 %
Asset turnover rate	32.9 %	24.8 %	28.7 %	43.5 %
Farm interest expense	38,129	51,301	16,234	65,227
Value of operator lbr and mgmt.	43,526	38,926	28,201	75,635
Return on farm assets	56,456	-68,173	12,793	271,916
Average farm assets	1,724,229	1,578,918	729,261	3,151,822
Return on farm equity	18,327	-119,474	-3,440	206,689
Average farm equity	828,382	489,872	318,077	1,591,105
Value of farm production	566,439	391,558	209,466	1,372,541

**Liquidity & Repayment Capacity Measures**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2016**  
**(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	70	14	14	14
<b>Liquidity</b>				
Current ratio	1.54	1.13	1.37	1.68
Working capital	174,155	47,920	48,785	473,620
Working capital to gross inc	29.1 %	11.9 %	23.1 %	31.2 %
Current assets	494,026	424,761	180,273	1,167,760
Current liabilities	319,870	376,841	131,488	694,140
Gross revenues (accrual)	597,747	401,670	211,638	1,518,641
<b>Repayment capacity</b>				
Net farm income from operations	61,853	-80,547	24,761	282,325
Depreciation	53,791	43,423	15,710	117,512
Personal income	42,495	44,854	33,303	23,847
Family living/owner withdrawals	-57,956	-50,527	-46,541	-70,767
Cash discrepancy	-1,527	-1,599	-706	-4,126
Payments on personal debt	-4,679	-5,148	-3,213	-4,513
Income taxes paid	-11,803	-4,265	-9,052	-20,878
Interest on term debt	24,638	32,448	9,636	37,996
Capital debt repayment capacity	108,339	-19,761	24,605	365,522
Scheduled term debt payments	-107,300	-107,930	-43,375	-208,997
Capital debt repayment margin	1,038	-127,691	-18,770	156,526
Cash replacement allowance	-14,153	-16,979	-3,075	-31,577
Replacement margin	-13,114	-144,670	-21,845	124,948
Term debt coverage ratio	1.01	-0.18	0.57	1.75
Replacement coverage ratio	0.89	-0.16	0.53	1.52

**Balance Sheet at Cost Values**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2016**  
**(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	65	13	12	14
<b>Assets</b>				
<b>Current Farm Assets</b>				
Cash and checking balance	11,307	24,848	14,698	-25,331
Prepaid expenses & supplies	28,541	18,245	2,025	93,287
Growing crops	2,250	1,763	431	8,209
Accounts receivable	26,231	19,137	1,387	81,947
Hedging accounts	195	973	-	-
Crops held for sale or feed	329,172	229,713	108,262	868,370
Market livestock held for sale	96,329	130,082	53,470	141,277
Other current assets	-	-	-	-
Total current farm assets	494,026	424,761	180,273	1,167,760
<b>Intermediate Farm Assets</b>				
Breeding livestock	162,672	207,964	142,293	166,177
Machinery and equipment	416,501	312,378	85,876	981,084
Titled vehicles	61,366	44,375	21,501	120,062
Other intermediate assets	4,556	3,613	67	13,572
Total intermediate farm assets	645,094	568,330	249,736	1,280,895
<b>Long Term Farm Assets</b>				
Farm land	385,036	277,374	186,044	613,618
Buildings and improvements	115,496	102,587	16,870	210,622
Other long-term assets	19,981	27,849	2,485	39,055
Total long-term farm assets	520,513	407,810	205,399	863,295
Total Farm Assets	1,659,633	1,400,901	635,408	3,311,951
Total Nonfarm Assets	253,108	111,707	113,153	500,048
Total Assets	1,912,741	1,512,608	748,560	3,811,999
<b>Liabilities</b>				
<b>Current Farm Liabilities</b>				
Accrued interest	16,630	27,076	4,025	29,541
Accounts payable	11,264	13,604	16,601	21,577
Current notes	223,471	270,891	89,687	493,844
Principal due on term debt	68,505	65,270	21,175	149,177
Total current farm liabilities	319,870	376,841	131,488	694,140
Total intermediate farm liabs	245,099	313,788	72,761	509,741
Total long term farm liabilities	281,908	287,587	150,060	428,022
Total farm liabilities	846,877	978,215	354,309	1,631,903
Total nonfarm liabilities	53,329	32,559	34,620	66,952
Total liabilities	900,206	1,010,774	388,928	1,698,854
Net worth (farm and nonfarm)	1,012,535	501,834	359,632	2,113,145
Net worth change	47,641	-77,870	11,068	218,618
Percent net worth change	5 %	-13 %	3 %	12 %
<b>Ratio Analysis</b>				
Current farm liabilities / assets	65 %	89 %	73 %	59 %
Intermediate farm liab. / assets	38 %	55 %	29 %	40 %
Long term farm liab. / assets	54 %	71 %	73 %	50 %
Total debt to asset ratio	47 %	67 %	52 %	45 %

**Statement Of Cash Flows**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2016**  
**(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	70	14	14	14
Beginning cash (farm & nonfarm)	19,916	10,544	31,333	-9,156
<b>Cash Provided By Operating Activities</b>				
Gross cash farm income	606,942	504,361	235,232	1,273,296
Total cash farm expense	-526,437	-463,072	-198,567	-1,117,133
Net cash from hedging transactions	-74	-	-370	-
Cash provided by operating	80,431	41,290	36,295	156,163
<b>Cash Provided By Investing Activities</b>				
Sale of breeding livestock	5,763	8,700	9,197	2,999
Sale of machinery & equipment	3,571	3,000	250	7,727
Sale of titled vehicles	616	786	-	174
Sale of farm land	18,110	-	-	-
Sale of farm buildings	671	-	3,355	-
Sale of other farm assets	568	-	-	2,839
Sale of nonfarm assets	6,979	20,435	-	11,889
Purchase of breeding livestock	-20,480	-24,521	-28,962	-15,013
Purchase of machinery & equip.	-43,265	-39,158	-6,404	-115,074
Purchase of titled vehicles	-5,318	-4,941	-3,911	-6,376
Purchase of farm land	-15,444	-	-	-62,437
Purchase of farm buildings	-6,389	-5,207	-1,557	-19,321
Purchase of other farm assets	-489	-	-	-2,229
Purchase of nonfarm assets	-16,004	-19,034	-2,201	-18,379
Cash provided by investing	-71,112	-59,940	-30,233	-213,203
<b>Cash Provided By Financing Activities</b>				
Money borrowed	590,965	685,789	234,063	1,249,898
Principal payments	-569,621	-638,395	-223,538	-1,122,535
Personal income	42,495	44,854	33,303	23,847
Family living/owner withdrawals	-57,956	-50,527	-46,541	-70,767
Income and social security tax	-11,803	-4,265	-9,052	-20,878
Capital contributions	170	821	-	-
Capital distributions	-26	-	-	-129
Dividends paid	-	-	-	-
Cash gifts and inheritances	1,150	2,356	-	-
Gifts given	-1,228	-	-	-5,944
Other cash flows	-	-	-	-
Cash provided by financing	-5,854	40,633	-11,765	53,493
Net change in cash balance	3,466	21,982	-5,703	-3,546
Ending cash (farm & nonfarm)	21,854	30,927	24,924	-16,827
Discrepancy	1,527	1,599	706	4,126

**Financial Standards Measures**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2016**  
**(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	70	14	14	14
<b>Liquidity</b>				
Current ratio	1.54	1.13	1.37	1.68
Working capital	174,155	47,920	48,785	473,620
Working capital to gross inc	29.1 %	11.9 %	23.1 %	31.2 %
<b>Solvency (cost)</b>				
Farm debt to asset ratio	51 %	70 %	56 %	49 %
Farm equity to asset ratio	49 %	30 %	44 %	51 %
Farm debt to equity ratio	1.04	2.31	1.26	0.97
<b>Profitability (cost)</b>				
Rate of return on farm assets	3.3 %	-4.3 %	1.8 %	8.6 %
Rate of return on farm equity	2.2 %	-24.4 %	-1.1 %	13.0 %
Operating profit margin	10.0 %	-17.4 %	6.1 %	19.8 %
Net farm income	61,881	-80,547	24,902	282,325
EBITDA	153,773	14,177	56,705	465,063
<b>Repayment Capacity</b>				
Capital debt repayment capacity	108,339	-19,761	24,605	365,522
Capital debt repayment margin	1,038	-127,691	-18,770	156,526
Replacement margin	-13,114	-144,670	-21,845	124,948
Term debt coverage ratio	1.01	-0.18	0.57	1.75
Replacement coverage ratio	0.89	-0.16	0.53	1.52
<b>Efficiency</b>				
Asset turnover rate (cost)	32.9 %	24.8 %	28.7 %	43.5 %
Operating expense ratio	75.9 %	96.7 %	75.6 %	69.4 %
Depreciation expense ratio	8.4 %	10.2 %	6.8 %	7.7 %
Interest expense ratio	6.0 %	12.0 %	7.0 %	4.3 %
Net farm income ratio	9.7 %	-18.9 %	10.7 %	18.6 %

**Crop Production and Marketing Summary**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2016**  
**(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	70	14	14	14
<b>Acreage Summary</b>				
Total acres owned	950	1,133	530	1,111
Total crop acres	1,761	1,621	859	4,054
Crop acres owned	463	447	260	675
Crop acres cash rented	1,194	1,104	578	3,123
Crop acres share rented	104	71	20	256
Total pasture acres	1,514	2,488	1,607	1,178
Percent crop acres owned	26 %	28 %	30 %	17 %
Mach invest/crop acre cost	280	260	181	271
<b>Average Price Received (Cash Sales Only)</b>				
Wheat, Spring per bushel	4.40	4.31	4.40	4.39
Corn per bushel	3.25	3.25	3.09	3.15
Sunflowers per cwt	19.13	17.79	17.79	19.39
Soybeans per bushel	8.49	-	-	8.41
Barley per bushel	3.83	-	-	-
Peas, Field per bushel	6.75	-	-	6.87
Wheat, Durum per bushel	5.68	-	-	-
Flax per bushel	8.12	-	-	-
Hay, Mixed Alfalfa/Grass per ton	79.37	-	-	-
Canola per cwt	17.98	-	-	-
<b>Average Yield Per Acre</b>				
Pasture (aum)	0.550	0.480	0.476	0.439
Wheat, Spring (bushel)	42.18	31.02	42.89	46.30
Corn (bushel)	113.12	92.52	118.17	116.18
Hay, Mixed Alfalfa/Grass (ton)	1.02	0.891	1.14	1.03
Sunflowers (cwt)	20.44	17.06	24.75	23.00
Hay, Small Grain (ton)	1.62	1.90	2.31	-
Hay, Grass (ton)	0.744	0.975	0.682	-
Hay, Alfalfa (ton)	1.41	1.39	1.81	-
Peas, Field (bushel)	35.18	-	55.47	33.25
Corn Silage (ton)	16.83	-	13.64	-
Barley (bushel)	59.92	-	75.86	-
Flax (bushel)	19.78	-	26.82	-
Soybeans (bushel)	41.83	-	-	43.43
Wheat, Durum (bushel)	46.15	-	-	-
Canola (cwt)	23.29	-	-	-
Lentils (cwt)	15.36	-	-	15.36

**Household and Personal Expenses**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2016**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	27	5	5
Average family size	2.8	2.2	2.8
<b>Family Living Expenses</b>			
Food and meals expense	9,950	8,968	15,323
Medical care	4,438	4,522	3,969
Health insurance	6,950	7,321	6,611
Cash donations	2,302	1,518	1,201
Household supplies	6,690	7,842	3,755
Clothing	1,864	1,973	2,184
Personal care	2,364	979	1,317
Child / Dependent care	666	104	238
Alimony and child support	-	-	-
Gifts	2,100	3,809	2,483
Education	1,374	7	731
Recreation	4,515	2,684	8,994
Utilities (household share)	3,311	3,193	3,463
Personal vehicle operating exp	3,137	2,652	2,076
Household real estate taxes	346	-	1,440
Dwelling rent	922	-	939
Household repairs	1,605	504	5,666
Personal interest	3,841	490	8,908
Disability / Long term care ins	718	62	1,818
Life insurance payments	2,481	1,836	5,145
Personal property insurance	730	-	177
Miscellaneous	5,239	2,024	14,334
Total cash family living expense	65,541	50,489	90,773
Family living from the farm	230	-	-
Total family living	65,771	50,489	90,773
<b>Other Nonfarm Expenditures</b>			
Income taxes	17,189	4,551	32,458
Furnishing & appliance purchases	62	-	-
Nonfarm vehicle purchases	2,850	-	6,000
Nonfarm real estate purchases	9,135	-	-17,194
Other nonfarm capital purchases	608	-	1,858
Nonfarm savings & investments	12,659	-47	15,217
Total other nonfarm expenditures	42,503	4,504	38,339
Total cash family living investment & nonfarm capital purch	108,044	54,993	129,112

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**Operator and Labor Information**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2016**  
**(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	70	14	14	14
<b>Operator Information</b>				
Average number of operators	1.1	1.1	1.1	1.0
Average age of operators	46.3	49.9	40.8	48.2
Average number of years farming	22.2	26.3	18.6	23.5
<b>Results Per Operator</b>				
Working capital	148,171	41,708	40,495	473,620
Total assets (cost)	1,856,962	1,564,948	723,992	3,811,999
Total liabilities	901,605	1,082,253	388,009	1,698,854
Net worth (cost)	955,357	482,695	335,983	2,113,145
Gross farm income	596,379	398,290	203,324	1,518,641
Total farm expense	538,649	473,467	181,658	1,236,317
Net farm income from operations	57,729	-75,177	21,666	282,325
Net nonfarm income	39,662	41,864	29,140	23,847
Family living & tax withdrawals	66,534	52,632	49,262	95,770
Total acres owned	886.2	1,057.2	464.1	1,111.4
Total crop acres	1,643.5	1,513.1	751.4	4,053.5
Crop acres owned	431.9	416.7	227.8	674.9
Crop acres cash rented	1,114.4	1,030.5	506.0	3,122.9
Crop acres share rented	97.1	65.9	17.6	255.7
Total pasture acres	1,412.9	2,322.2	1,406.5	1,177.5
<b>Labor Analysis</b>				
Number of farms	70	14	14	14
Total unpaid labor hours	2,132	2,543	1,721	2,668
Total hired labor hours	1,106	674	114	1,798
Total labor hours per farm	3,238	3,217	1,836	4,466
Unpaid hours per operator	1,990	2,373	1,506	2,668

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**Nonfarm Summary**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2016**  
**(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	70	14	14	14
<b>Nonfarm Income</b>				
Personal wages & salary	32,425	30,843	30,512	18,978
Net nonfarm business income	2,077	8,351	-	129
Personal rental income	110	-	-	552
Personal interest income	117	0	7	539
Personal cash dividends	10	11	0	-
Tax refunds	1,701	738	1,697	1,006
Other nonfarm income	6,054	4,911	1,087	2,644
Total nonfarm income	42,495	44,854	33,303	23,847
Gifts and inheritances	1,150	2,356	-	-

**Financial Summary**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2016**  
**(Farms Sorted By Gross Farm Income)**

	<u>Avg. Of</u> <u>All Farms</u>	<u>Less than</u> <u>100,000</u>	<u>100,001 -</u> <u>250,000</u>	<u>250,001 -</u> <u>500,000</u>	<u>500,001 -</u> <u>1,000,000</u>	<u>1,000,001-</u> <u>2,000,000</u>
Number of farms	70	11	10	18	21	7
<b>Income Statement</b>						
Gross cash farm income	606,942	48,127	174,341	328,578	701,061	1,418,914
Total cash farm expense	526,437	41,632	136,881	267,547	596,282	1,214,798
Net cash farm income	80,506	6,494	37,460	61,031	104,779	204,115
Inventory change	35,139	4,003	-16,467	-18,629	18,723	261,576
Depreciation	-53,791	-7,630	-16,003	-21,889	-69,311	-166,716
Net farm income from operations	61,853	2,868	4,991	20,514	54,192	298,976
Gain or loss on capital sales	28	-	197	-	-	-
Average net farm income	61,881	2,868	5,188	20,514	54,192	298,976
Median net farm income	27,949	1,124	20,128	27,712	55,557	185,233
<b>Profitability (cost)</b>						
Rate of return on assets	3.3 %	-0.6 %	-1.2 %	0.8 %	2.5 %	7.3 %
Rate of return on equity	2.2 %	-6.9 %	-8.4 %	-2.8 %	0.0 %	10.0 %
Operating profit margin	10.0 %	-4.1 %	-4.6 %	2.8 %	7.8 %	16.6 %
Asset turnover rate	32.9 %	14.9 %	27.1 %	28.4 %	31.7 %	44.1 %
<b>Liquidity &amp; Repayment (end of year)</b>						
Current assets	494,026	37,900	158,077	287,053	643,344	1,212,986
Current liabilities	319,870	27,492	111,754	217,009	415,213	609,621
Current ratio	1.54	1.38	1.41	1.32	1.55	1.99
Working capital	174,155	10,408	46,323	70,044	228,131	603,365
Working capital to gross inc	29.1 %	19.3 %	28.5 %	22.5 %	32.5 %	35.8 %
Term debt coverage ratio	1.01	1.83	0.83	0.59	0.82	2.06
Replacement coverage ratio	0.89	1.63	0.75	0.53	0.70	1.83
Term debt to EBITDA	3.44	9.11	6.45	5.16	3.62	1.61
<b>Solvency (end of year at cost)</b>						
Number of sole proprietors	65	11	9	18	18	7
Total assets	1,912,741	499,750	657,684	1,208,226	2,302,736	4,517,981
Total liabilities	900,206	286,857	333,269	589,482	1,107,495	1,775,897
Net worth	1,012,535	212,893	324,414	618,744	1,195,241	2,742,085
Net worth change	47,641	30,523	17,967	10,466	30,736	219,046
Farm debt to asset ratio	51 %	60 %	57 %	55 %	52 %	44 %
Total debt to asset ratio	47 %	57 %	51 %	49 %	48 %	39 %
Change in earned net worth %	5 %	17 %	6 %	2 %	3 %	9 %
<b>Nonfarm Information</b>						
Net nonfarm income	42,495	81,321	50,678	43,465	26,005	33,219
Farms reporting living expenses	27	3	5	9	6	3
Total family living expense	65,771	-	38,346	59,988	77,493	-
<b>Crop Acres</b>						
Total crop acres	1,761	165	501	1,071	2,523	4,061
Total crop acres owned	463	135	98	334	718	478
Total crop acres cash rented	1,194	30	385	677	1,638	3,583
Total crop acres share rented	104	-	19	60	168	-
Machinery value per crop acre	280	387	276	194	262	363

**Financial Summary**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2016**  
**(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	70	12	16	10	17	15
<b>Income Statement</b>						
Gross cash farm income	606,942	169,751	600,865	655,559	881,237	619,900
Total cash farm expense	526,437	124,277	595,117	513,797	761,729	516,667
Net cash farm income	80,506	45,474	5,748	141,761	119,508	103,233
Inventory change	35,139	-14,579	71,428	90,792	62,748	-32,188
Depreciation	-53,791	-9,578	-35,700	-60,421	-103,403	-47,813
Net farm income from operations	61,853	21,316	41,476	172,132	78,854	23,231
Gain or loss on capital sales	28	-	123	-	-	-
Average net farm income	61,881	21,316	41,599	172,132	78,854	23,231
Median net farm income	27,949	17,498	29,566	92,247	58,492	-7,251
<b>Profitability (cost)</b>						
Rate of return on assets	3.3 %	2.3 %	3.4 %	8.7 %	2.9 %	0.3 %
Rate of return on equity	2.2 %	0.6 %	1.2 %	12.2 %	1.1 %	-1.7 %
Operating profit margin	10.0 %	8.0 %	9.6 %	21.1 %	9.0 %	1.3 %
Asset turnover rate	32.9 %	29.1 %	35.1 %	41.1 %	32.6 %	26.4 %
<b>Liquidity &amp; Repayment (end of year)</b>						
Current assets	494,026	146,923	518,045	593,447	771,266	390,343
Current liabilities	319,870	123,097	481,729	308,834	441,236	183,200
Current ratio	1.54	1.19	1.08	1.92	1.75	2.13
Working capital	174,155	23,826	36,316	284,613	330,030	207,143
Working capital to gross inc	29.1 %	14.4 %	5.1 %	39.4 %	34.3 %	58.9 %
Term debt coverage ratio	1.01	1.09	0.69	2.31	1.01	0.71
Replacement coverage ratio	0.89	1.08	0.68	1.93	0.83	0.61
Term debt to EBITDA	3.44	4.70	5.37	1.34	3.36	4.46
<b>Solvency (end of year at cost)</b>						
Number of sole proprietors	65	12	15	10	15	13
Total assets	1,912,741	595,201	1,813,915	2,008,699	3,322,031	1,543,043
Total liabilities	900,206	352,144	1,281,297	790,116	1,497,097	362,354
Net worth	1,012,535	243,057	532,619	1,218,583	1,824,934	1,180,689
Net worth change	47,641	43,145	36,016	114,771	37,171	25,647
Farm debt to asset ratio	51 %	61 %	73 %	43 %	49 %	28 %
Total debt to asset ratio	47 %	59 %	71 %	39 %	45 %	23 %
Change in earned net worth %	5 %	22 %	7 %	10 %	2 %	2 %
<b>Nonfarm Information</b>						
Net nonfarm income	42,495	54,524	53,632	20,596	37,829	40,881
Farms reporting living expenses	27	4	4	2	9	8
Total family living expense	65,771	-	-	-	88,839	52,017
<b>Crop Acres</b>						
Total crop acres	1,761	450	1,588	2,299	2,962	1,273
Total crop acres owned	463	37	380	440	811	512
Total crop acres cash rented	1,194	367	1,132	1,820	1,961	635
Total crop acres share rented	104	46	76	40	190	127
Machinery value per crop acre	280	211	204	228	339	309

**Financial Summary**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2016**  
**(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	70	23	13	17	14
<b>Income Statement</b>					
Gross cash farm income	606,942	771,955	214,833	424,774	624,215
Total cash farm expense	526,437	630,920	147,847	354,187	607,686
Net cash farm income	80,506	141,036	66,987	70,587	16,529
Inventory change	35,139	110,227	-39,618	-35,768	61,682
Depreciation	-53,791	-82,625	-18,383	-40,546	-40,163
Net farm income from operations	61,853	168,638	8,985	-5,728	38,048
Gain or loss on capital sales	28	-	151	-	-
Average net farm income	61,881	168,638	9,137	-5,728	38,048
Median net farm income	27,949	117,423	3,972	-13,122	-1,118
<b>Profitability (cost)</b>					
Rate of return on assets	3.3 %	7.0 %	0.3 %	-0.3 %	3.2 %
Rate of return on equity	2.2 %	9.2 %	-3.5 %	-7.3 %	0.6 %
Operating profit margin	10.0 %	16.4 %	1.5 %	-1.2 %	10.4 %
Asset turnover rate	32.9 %	42.7 %	19.9 %	25.1 %	31.0 %
<b>Liquidity &amp; Repayment (end of year)</b>					
Current assets	494,026	721,378	174,302	365,330	537,897
Current liabilities	319,870	360,043	103,204	305,843	468,372
Current ratio	1.54	2.00	1.69	1.19	1.15
Working capital	174,155	361,335	71,097	59,487	69,526
Working capital to gross inc	29.1 %	40.1 %	45.1 %	15.7 %	10.1 %
Term debt coverage ratio	1.01	1.95	0.66	0.34	0.66
Replacement coverage ratio	0.89	1.60	0.60	0.30	0.62
Term debt to EBITDA	3.44	1.46	6.07	7.24	5.36
<b>Solvency (end of year at cost)</b>					
Number of sole proprietors	65	21	12	16	14
Total assets	1,912,741	2,577,277	821,308	1,505,655	2,025,954
Total liabilities	900,206	924,070	382,398	816,896	1,271,187
Net worth	1,012,535	1,653,207	438,910	688,759	754,767
Net worth change	47,641	132,229	8,754	-21,742	40,198
Farm debt to asset ratio	51 %	39 %	48 %	58 %	70 %
Total debt to asset ratio	47 %	36 %	47 %	54 %	63 %
Change in earned net worth %	5 %	9 %	2 %	-3 %	6 %
<b>Nonfarm Information</b>					
Net nonfarm income	42,495	34,700	34,040	38,837	64,285
Farms reporting living expenses	27	7	6	7	6
Total family living expense	65,771	82,167	46,186	59,416	63,874
<b>Crop Acres</b>					
Total crop acres	1,761	2,903	522	1,559	1,382
Total crop acres owned	463	569	243	506	409
Total crop acres cash rented	1,194	2,143	245	914	966
Total crop acres share rented	104	191	33	139	7
Machinery value per crop acre	280	259	364	255	270

## EXPLANATORY NOTES FOR CROPS TABLES

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

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

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

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

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

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

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2016**  
**(Farms Sorted By Net Return)**

**Barley on Cash Rent**

	<u>Avg. Of All Farms</u>
Number of farms	5
Acres	229.55
Yield per acre (bu.)	56.16
Operators share of yield %	100.00
Value per bu.	3.93
Other product return per acre	3.70
Total product return per acre	224.26
Crop insurance per acre	19.09
Gross return per acre	243.35
<b>Direct Expenses</b>	
Seed	11.48
Fertilizer	43.99
Crop chemicals	25.36
Crop insurance	21.33
Fuel & oil	9.01
Repairs	21.15
Custom hire	13.23
Land rent	33.22
Operating interest	5.29
Total direct expenses per acre	184.05
Return over direct exp per acre	59.30
<b>Overhead Expenses</b>	
Custom hire	1.02
Machinery leases	4.31
Farm insurance	3.90
Utilities	2.59
Dues & professional fees	1.05
Interest	5.31
Mach & bldg depreciation	21.05
Miscellaneous	6.63
Total overhead expenses per acre	45.87
Total dir & ovhd expenses per acre	229.91
Net return per acre	13.43
Government payments	6.50
Net return with govt pmts	19.93
Labor & management charge	22.56
Net return over lbr & mgt	-2.63
<b>Cost of Production</b>	
Total direct expense per bu.	3.28
Total dir & ovhd exp per bu.	4.09
Less govt & other income	3.57
With labor & management	3.97
Net value per unit	3.93
Machinery cost per acre	74.17
Est. labor hours per acre	1.19

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2016**  
**(Farms Sorted By Net Return)**

**Corn on Owned Land**

	<u>Avg. Of All Farms</u>
Number of farms	16
Acres	180.43
Yield per acre (bu.)	109.62
Operators share of yield %	100.00
Value per bu.	3.17
Total product return per acre	347.11
Other crop income per acre	1.15
Gross return per acre	348.26
<b>Direct Expenses</b>	
Seed	66.41
Fertilizer	64.73
Crop chemicals	17.63
Crop insurance	12.18
Fuel & oil	10.01
Repairs	22.59
Custom hire	9.61
Operating interest	8.06
Total direct expenses per acre	211.22
Return over direct exp per acre	137.04
<b>Overhead Expenses</b>	
Hired labor	3.29
Machinery leases	1.76
Building leases	0.81
RE & pers. property taxes	5.13
Farm insurance	4.12
Utilities	2.98
Dues & professional fees	0.64
Interest	26.25
Mach & bldg depreciation	34.13
Miscellaneous	5.79
Total overhead expenses per acre	84.90
Total dir & ovhd expenses per acre	296.11
Net return per acre	52.15
Government payments	10.87
Net return with govt pmts	63.02
Labor & management charge	25.62
Net return over lbr & mgt	37.40
<b>Cost of Production</b>	
Total direct expense per bu.	1.93
Total dir & ovhd exp per bu.	2.70
Less govt & other income	2.59
With labor & management	2.83
Net value per unit	3.17
Machinery cost per acre	78.69
Est. labor hours per acre	1.31

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2016**  
**(Farms Sorted By Net Return)**

**Corn on Cash Rent**

	<u>Avg. Of</u> <u>All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	22	5	5
Acres	432.41	280.43	413.23
Yield per acre (bu.)	114.98	105.21	141.24
Operators share of yield %	100.00	100.00	100.00
Value per bu.	3.21	3.23	3.22
Total product return per acre	368.99	339.44	454.79
Crop insurance per acre	2.50	-	-
Other crop income per acre	0.54	3.63	-
Gross return per acre	372.02	343.07	454.79
<b>Direct Expenses</b>			
Seed	61.51	66.81	60.79
Fertilizer	63.08	50.46	76.94
Crop chemicals	16.89	21.61	16.49
Crop insurance	9.25	14.85	9.72
Fuel & oil	8.47	15.50	9.33
Repairs	20.32	31.91	14.59
Custom hire	14.74	11.42	5.66
Land rent	49.03	38.17	62.64
Operating interest	11.30	6.53	4.13
Miscellaneous	0.87	0.71	3.50
Total direct expenses per acre	255.46	257.99	263.79
Return over direct exp per acre	116.57	85.09	191.00
<b>Overhead Expenses</b>			
Custom hire	0.28	0.45	0.93
Hired labor	9.85	1.31	15.16
Machinery leases	4.54	0.63	4.66
Building leases	0.70	-	-
Farm insurance	4.20	4.46	2.71
Utilities	2.79	3.06	1.92
Interest	8.20	2.38	1.21
Mach & bldg depreciation	34.67	19.30	35.69
Miscellaneous	4.36	6.08	3.40
Total overhead expenses per acre	69.60	37.68	65.67
Total dir & ovhd expenses per acre	325.06	295.66	329.46
Net return per acre	46.97	47.41	125.33
Government payments	11.99	10.26	16.41
Net return with govt pmts	58.96	57.67	141.74
Labor & management charge	25.42	27.29	26.88
Net return over lbr & mgt	33.54	30.38	114.86
<b>Cost of Production</b>			
Total direct expense per bu.	2.22	2.45	1.87
Total dir & ovhd exp per bu.	2.83	2.81	2.33
Less govt & other income	2.70	2.68	2.22
With labor & management	2.92	2.94	2.41
Net value per unit	3.21	3.23	3.22
Machinery cost per acre	88.37	79.97	72.05
Est. labor hours per acre	1.35	1.41	1.34



**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2016**  
**(Farms Sorted By Net Return)**

**Corn Silage on Owned Land**

	<u>Avg. Of All Farms</u>
Number of farms	8
Acres	75.00
Yield per acre (ton)	16.46
Operators share of yield %	100.00
Value per ton	30.49
Total product return per acre	501.68
Gross return per acre	501.68
<b>Direct Expenses</b>	
Seed	71.64
Fertilizer	52.64
Crop chemicals	17.01
Crop insurance	9.11
Fuel & oil	17.32
Repairs	27.78
Custom hire	22.18
Operating interest	5.25
Miscellaneous	6.25
Total direct expenses per acre	229.18
Return over direct exp per acre	272.50
<b>Overhead Expenses</b>	
Custom hire	1.59
Hired labor	8.70
Machinery leases	0.81
RE & pers. property taxes	4.31
Farm insurance	3.45
Utilities	2.69
Dues & professional fees	0.47
Interest	34.81
Mach & bldg depreciation	28.18
Miscellaneous	7.25
Total overhead expenses per acre	92.26
Total dir & ovhd expenses per acre	321.44
Net return per acre	180.25
Government payments	11.81
Net return with govt pmts	192.06
Labor & management charge	24.28
Net return over lbr & mgt	167.78
<b>Cost of Production</b>	
Total direct expense per ton	13.93
Total dir & ovhd exp per ton	19.53
Less govt & other income	18.82
With labor & management	20.29
Net value per unit	30.49
Machinery cost per acre	101.95
Est. labor hours per acre	2.21

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2016**  
**(Farms Sorted By Net Return)**

**Corn Silage on Cash Rent**

	<u>Avg. Of All Farms</u>
Number of farms	5
Acres	76.81
Yield per acre (ton)	17.41
Operators share of yield %	100.00
Value per ton	26.32
Total product return per acre	458.17
Gross return per acre	458.17
<b>Direct Expenses</b>	
Seed	68.60
Fertilizer	62.06
Crop chemicals	15.20
Crop insurance	12.44
Fuel & oil	10.41
Repairs	20.84
Custom hire	65.65
Land rent	47.84
Machinery leases	1.55
Operating interest	6.47
Miscellaneous	1.19
Total direct expenses per acre	312.23
Return over direct exp per acre	145.93
<b>Overhead Expenses</b>	
Custom hire	0.87
Hired labor	8.00
Machinery leases	0.55
Building leases	2.77
Farm insurance	3.46
Utilities	2.21
Dues & professional fees	1.52
Interest	2.82
Mach & bldg depreciation	21.95
Miscellaneous	8.42
Total overhead expenses per acre	52.58
Total dir & ovhd expenses per acre	364.81
Net return per acre	93.36
Government payments	14.32
Net return with govt pmts	107.67
Labor & management charge	24.62
Net return over lbr & mgt	83.06
<b>Cost of Production</b>	
Total direct expense per ton	17.94
Total dir & ovhd exp per ton	20.96
Less govt & other income	20.14
With labor & management	21.55
Net value per unit	26.32
Machinery cost per acre	123.56
Est. labor hours per acre	1.59

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2016**  
**(Farms Sorted By Net Return)**

**Hay, Alfalfa on Owned Land**

	<u>Avg. Of All Farms</u>
Number of farms	6
Acres	64.87
Yield per acre (ton)	1.56
Operators share of yield %	100.00
Value per ton	63.27
Other product return per acre	3.29
Total product return per acre	102.24
Crop insurance per acre	19.20
Gross return per acre	121.44
<b>Direct Expenses</b>	
Crop insurance	8.09
Fuel & oil	4.99
Repairs	11.16
Custom hire	3.00
Operating interest	1.83
Total direct expenses per acre	29.07
Return over direct exp per acre	92.37
<b>Overhead Expenses</b>	
Custom hire	0.16
Hired labor	3.55
RE & pers. property taxes	4.19
Farm insurance	4.09
Utilities	3.49
Dues & professional fees	0.27
Interest	13.98
Mach & bldg depreciation	12.10
Miscellaneous	4.36
Total overhead expenses per acre	46.19
Total dir & ovhd expenses per acre	75.26
Net return per acre	46.18
Government payments	11.82
Net return with govt pmts	58.00
Labor & management charge	9.71
Net return over lbr & mgt	48.30
<b>Cost of Production</b>	
Total direct expense per ton	18.59
Total dir & ovhd exp per ton	48.12
Less govt & other income	26.18
With labor & management	32.39
Net value per unit	63.27
Machinery cost per acre	32.40
Est. labor hours per acre	0.85

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2016**  
**(Farms Sorted By Net Return)**

**Hay, Alfalfa on Cash Rent**

	<b>Avg. Of All Farms</b>
Number of farms	8
Acres	79.51
Yield per acre (ton)	1.12
Operators share of yield %	100.00
Value per ton	55.98
Total product return per acre	62.94
Crop insurance per acre	12.61
Gross return per acre	75.56
<b>Direct Expenses</b>	
Crop insurance	6.71
Fuel & oil	5.70
Repairs	8.39
Land rent	33.03
Operating interest	3.45
Total direct expenses per acre	57.29
Return over direct exp per acre	18.27
<b>Overhead Expenses</b>	
Hired labor	2.04
Farm insurance	3.42
Utilities	2.74
Dues & professional fees	0.81
Interest	4.13
Mach & bldg depreciation	10.22
Miscellaneous	5.40
Total overhead expenses per acre	28.76
Total dir & ovhd expenses per acre	86.04
Net return per acre	-10.49
Government payments	11.55
Net return with govt pmts	1.07
Labor & management charge	12.08
Net return over lbr & mgt	-11.01
<b>Cost of Production</b>	
Total direct expense per ton	50.95
Total dir & ovhd exp per ton	76.52
Less govt & other income	55.03
With labor & management	65.77
Net value per unit	55.98
Machinery cost per acre	28.39
Est. labor hours per acre	1.10

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

**Hay, Grass on Owned Land**

	<b>Avg. Of All Farms</b>
Number of farms	5
Acres	71.80
Yield per acre (ton)	0.91
Operators share of yield %	100.00
Value per ton	48.10
Other product return per acre	0.40
Total product return per acre	44.08
Crop insurance per acre	0.03
Gross return per acre	44.11
<b>Direct Expenses</b>	
Fuel & oil	4.50
Repairs	8.16
Operating interest	4.79
Total direct expenses per acre	17.45
Return over direct exp per acre	26.66
<b>Overhead Expenses</b>	
Hired labor	1.02
Machinery leases	0.73
Building leases	2.57
RE & pers. property taxes	2.47
Farm insurance	0.57
Utilities	0.59
Dues & professional fees	1.01
Interest	17.35
Mach & bldg depreciation	7.51
Miscellaneous	1.38
Total overhead expenses per acre	35.20
Total dir & ovhd expenses per acre	52.65
Net return per acre	-8.54
Government payments	2.08
Net return with govt pmts	-6.46
Labor & management charge	11.02
Net return over lbr & mgt	-17.47
<b>Cost of Production</b>	
Total direct expense per ton	19.22
Total dir & ovhd exp per ton	57.98
Less govt & other income	55.21
With labor & management	67.34
Net value per unit	48.10
Machinery cost per acre	23.50
Est. labor hours per acre	0.90

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
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**Hay, Grass on Cash Rent**

	<u>Avg. Of All Farms</u>
Number of farms	7
Acres	183.62
Yield per acre (ton)	0.74
Operators share of yield %	100.00
Value per ton	62.34
Total product return per acre	45.92
Crop insurance per acre	2.51
Gross return per acre	48.43
<b>Direct Expenses</b>	
Crop insurance	0.53
Fuel & oil	4.12
Repairs	13.82
Land rent	13.04
Operating interest	1.73
Total direct expenses per acre	33.40
Return over direct exp per acre	15.04
<b>Overhead Expenses</b>	
Hired labor	0.86
Machinery leases	0.06
Farm insurance	1.11
Utilities	0.64
Dues & professional fees	0.20
Interest	0.40
Mach & bldg depreciation	7.93
Miscellaneous	2.18
Total overhead expenses per acre	13.38
Total dir & ovhd expenses per acre	46.77
Net return per acre	1.66
Government payments	10.94
Net return with govt pmts	12.61
Labor & management charge	7.46
Net return over lbr & mgt	5.14
<b>Cost of Production</b>	
Total direct expense per ton	45.34
Total dir & ovhd exp per ton	63.50
Less govt & other income	45.23
With labor & management	55.36
Net value per unit	62.34
Machinery cost per acre	26.09
Est. labor hours per acre	0.68

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
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**Hay, Mixed Alfalfa/Grass on Owned Land**

	<u>Avg. Of All Farms</u>
Number of farms	17
Acres	147.00
Yield per acre (ton)	0.81
Operators share of yield %	100.00
Value per ton	64.06
Other product return per acre	0.87
Total product return per acre	52.79
Crop insurance per acre	4.30
Gross return per acre	57.09
<b>Direct Expenses</b>	
Fertilizer	0.90
Crop insurance	2.46
Fuel & oil	4.89
Repairs	12.22
Custom hire	0.23
Machinery leases	0.04
Operating interest	2.34
Total direct expenses per acre	23.11
Return over direct exp per acre	33.98
<b>Overhead Expenses</b>	
Custom hire	0.05
Hired labor	3.33
Machinery leases	0.15
RE & pers. property taxes	3.53
Farm insurance	2.73
Utilities	1.78
Dues & professional fees	0.83
Interest	12.90
Mach & bldg depreciation	10.32
Miscellaneous	4.33
Total overhead expenses per acre	39.95
Total dir & ovhd expenses per acre	63.06
Net return per acre	-5.97
Government payments	5.48
Net return with govt pmts	-0.49
Labor & management charge	12.29
Net return over lbr & mgt	-12.78
<b>Cost of Production</b>	
Total direct expense per ton	28.52
Total dir & ovhd exp per ton	77.80
Less govt & other income	64.66
With labor & management	79.82
Net value per unit	64.06
Machinery cost per acre	28.35
Est. labor hours per acre	0.88

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
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**Hay, Mixed Alfalfa/Grass on Cash Rent**

	<u>Avg. Of All Farms</u>
Number of farms	18
Acres	205.98
Yield per acre (ton)	1.10
Operators share of yield %	100.00
Value per ton	56.59
Total product return per acre	62.13
Crop insurance per acre	0.74
Gross return per acre	62.87
<b>Direct Expenses</b>	
Fertilizer	0.97
Fuel & oil	5.43
Repairs	10.90
Land rent	22.25
Machinery leases	0.21
Operating interest	2.46
Miscellaneous	0.66
Total direct expenses per acre	42.88
Return over direct exp per acre	20.00
<b>Overhead Expenses</b>	
Hired labor	3.14
Machinery leases	0.90
Building leases	0.13
Farm insurance	2.32
Utilities	1.89
Dues & professional fees	0.70
Interest	3.07
Mach & bldg depreciation	11.95
Miscellaneous	2.68
Total overhead expenses per acre	26.78
Total dir & ovhd expenses per acre	69.65
Net return per acre	-6.78
Government payments	4.75
Net return with govt pmts	-2.04
Labor & management charge	10.99
Net return over lbr & mgt	-13.03
<b>Cost of Production</b>	
Total direct expense per ton	39.06
Total dir & ovhd exp per ton	63.45
Less govt & other income	58.45
With labor & management	68.47
Net value per unit	56.59
Machinery cost per acre	32.18
Est. labor hours per acre	0.79



**Crop Enterprise Analysis**  
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**Hay, Small Grain on Owned Land**

	<u>Avg. Of All Farms</u>
Number of farms	12
Acres	97.26
Yield per acre (ton)	1.76
Operators share of yield %	100.00
Value per ton	60.87
Total product return per acre	107.36
Gross return per acre	107.36
<b>Direct Expenses</b>	
Seed	12.52
Fertilizer	17.68
Crop chemicals	8.32
Crop insurance	1.77
Fuel & oil	7.22
Repairs	16.29
Custom hire	3.66
Operating interest	3.21
Total direct expenses per acre	70.67
Return over direct exp per acre	36.69
<b>Overhead Expenses</b>	
Hired labor	2.00
Machinery leases	0.40
RE & pers. property taxes	5.10
Farm insurance	3.64
Utilities	3.10
Dues & professional fees	1.39
Interest	21.26
Mach & bldg depreciation	14.31
Miscellaneous	7.16
Total overhead expenses per acre	58.35
Total dir & ovhd expenses per acre	129.02
Net return per acre	-21.65
Government payments	9.34
Net return with govt pmts	-12.31
Labor & management charge	16.30
Net return over lbr & mgt	-28.61
<b>Cost of Production</b>	
Total direct expense per ton	40.07
Total dir & ovhd exp per ton	73.14
Less govt & other income	67.85
With labor & management	77.09
Net value per unit	60.87
Machinery cost per acre	43.84
Est. labor hours per acre	1.27

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
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**Hay, Small Grain on Cash Rent**

	<u>Avg. Of All Farms</u>
Number of farms	10
Acres	59.41
Yield per acre (ton)	1.91
Operators share of yield %	100.00
Value per ton	60.28
Other product return per acre	7.37
Total product return per acre	122.77
Gross return per acre	122.77
<b>Direct Expenses</b>	
Seed	14.69
Fertilizer	28.48
Crop chemicals	4.11
Crop insurance	4.51
Fuel & oil	8.00
Repairs	15.06
Custom hire	19.24
Land rent	32.11
Operating interest	1.95
Miscellaneous	1.03
Total direct expenses per acre	129.18
Return over direct exp per acre	-6.41
<b>Overhead Expenses</b>	
Custom hire	0.73
Hired labor	3.56
Farm insurance	3.45
Utilities	2.34
Dues & professional fees	1.04
Interest	5.07
Mach & bldg depreciation	13.17
Miscellaneous	8.06
Total overhead expenses per acre	37.43
Total dir & ovhd expenses per acre	166.60
Net return per acre	-43.84
Government payments	9.77
Net return with govt pmts	-34.07
Labor & management charge	14.53
Net return over lbr & mgt	-48.60
<b>Cost of Production</b>	
Total direct expense per ton	67.48
Total dir & ovhd exp per ton	87.03
Less govt & other income	78.08
With labor & management	85.67
Net value per unit	60.28
Machinery cost per acre	60.92
Est. labor hours per acre	1.40

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

**Pasture on Owned Land**

	<u>Avg. Of All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	24	5	5
Acres	721.88	706.70	869.16
Yield per acre (aum)	0.58	0.51	0.78
Operators share of yield %	100.00	100.00	100.00
Value per aum	20.86	21.69	19.72
Total product return per acre	12.04	11.14	15.33
Crop insurance per acre	0.88	0.66	2.12
Gross return per acre	12.93	11.79	17.46
<b>Direct Expenses</b>			
Crop insurance	0.47	0.32	1.04
Repairs	0.57	0.56	0.50
Total direct expenses per acre	1.45	1.17	2.03
Return over direct exp per acre	11.48	10.62	15.42
<b>Overhead Expenses</b>			
RE & pers. property taxes	1.75	1.86	1.89
Interest	7.74	7.78	4.96
Mach & bldg depreciation	0.48	0.58	0.50
Miscellaneous	0.79	0.99	0.68
Total overhead expenses per acre	10.76	11.22	8.03
Total dir & ovhd expenses per acre	12.21	12.39	10.06
Net return per acre	0.71	-0.60	7.39

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
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**Pasture on Cash Rent**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	31	6	6	7
Acres	1,652.12	1,374.36	2,427.00	1,524.24
Yield per acre (aum)	0.59	0.59	0.51	0.75
Operators share of yield %	100.00	100.00	100.00	100.00
Value per aum	21.72	19.83	23.04	21.49
Total product return per acre	12.74	11.61	11.86	16.11
Crop insurance per acre	0.46	-	-	1.51
Gross return per acre	13.20	11.61	11.86	17.62
<b>Direct Expenses</b>				
Crop insurance	0.28	0.36	0.05	0.64
Repairs	0.53	0.73	0.44	0.42
Land rent	12.51	21.34	10.59	10.39
Total direct expenses per acre	13.73	22.93	11.51	11.83
Return over direct exp per acre	-0.53	-11.32	0.35	5.79
<b>Overhead Expenses</b>				
Mach & bldg depreciation	0.50	0.61	0.51	0.47
Miscellaneous	0.78	1.09	0.68	0.63
Total overhead expenses per acre	1.27	1.69	1.19	1.10
Total dir & ovhd expenses per acre	15.01	24.62	12.70	12.93
Net return per acre	-1.80	-13.02	-0.84	4.69

**Crop Enterprise Analysis**  
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**Peas, Field on Cash Rent**

	<u>Avg. Of All Farms</u>
Number of farms	6
Acres	290.39
Yield per acre (bu.)	41.66
Operators share of yield %	100.00
Value per bu.	7.58
Other product return per acre	5.65
Total product return per acre	321.40
Crop insurance per acre	19.47
Gross return per acre	340.87
<b>Direct Expenses</b>	
Seed	45.47
Fertilizer	9.02
Crop chemicals	35.41
Crop insurance	17.04
Fuel & oil	8.28
Repairs	15.42
Custom hire	12.14
Land rent	35.64
Operating interest	2.61
Miscellaneous	0.09
Total direct expenses per acre	181.14
Return over direct exp per acre	159.73
<b>Overhead Expenses</b>	
Hired labor	4.71
Machinery leases	1.06
Farm insurance	4.25
Utilities	2.23
Dues & professional fees	1.14
Interest	2.29
Mach & bldg depreciation	35.62
Miscellaneous	2.16
Total overhead expenses per acre	53.45
Total dir & ovhd expenses per acre	234.59
Net return per acre	106.29
Government payments	8.83
Net return with govt pmts	115.11
Labor & management charge	24.41
Net return over lbr & mgt	90.70
<b>Cost of Production</b>	
Total direct expense per bu.	4.35
Total dir & ovhd exp per bu.	5.63
Less govt & other income	4.82
With labor & management	5.40
Net value per unit	7.58
Machinery cost per acre	72.67
Est. labor hours per acre	1.23

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
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**Soybeans on Cash Rent**

	<u>Avg. Of All Farms</u>
Number of farms	9
Acres	324.54
Yield per acre (bu.)	41.88
Operators share of yield %	100.00
Value per bu.	8.72
Total product return per acre	365.24
Gross return per acre	365.24
<b>Direct Expenses</b>	
Seed	69.17
Fertilizer	16.82
Crop chemicals	16.69
Crop insurance	9.30
Fuel & oil	8.17
Repairs	14.37
Custom hire	10.11
Land rent	55.66
Operating interest	3.35
Miscellaneous	1.41
Total direct expenses per acre	205.05
Return over direct exp per acre	160.18
<b>Overhead Expenses</b>	
Custom hire	0.45
Hired labor	7.24
Machinery leases	2.71
Farm insurance	3.14
Utilities	2.75
Dues & professional fees	0.01
Interest	2.43
Mach & bldg depreciation	27.69
Miscellaneous	3.25
Total overhead expenses per acre	49.66
Total dir & ovhd expenses per acre	254.71
Net return per acre	110.52
Government payments	13.71
Net return with govt pmts	124.23
Labor & management charge	17.89
Net return over lbr & mgt	106.34
<b>Cost of Production</b>	
Total direct expense per bu.	4.90
Total dir & ovhd exp per bu.	6.08
Less govt & other income	5.75
With labor & management	6.18
Net value per unit	8.72
Machinery cost per acre	63.98
Est. labor hours per acre	0.87

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

	<u>Avg. Of All Farms</u>
Number of farms	7
Acres	109.40
Yield per acre (cwt.)	20.33
Operators share of yield %	100.00
Value per cwt.	16.08
Total product return per acre	326.95
Crop insurance per acre	3.31
Gross return per acre	330.26
<b>Direct Expenses</b>	
Seed	37.09
Fertilizer	33.25
Crop chemicals	38.44
Crop insurance	11.91
Fuel & oil	8.38
Repairs	9.17
Custom hire	17.79
Operating interest	5.11
Total direct expenses per acre	161.14
Return over direct exp per acre	169.12
<b>Overhead Expenses</b>	
Machinery leases	0.35
RE & pers. property taxes	3.92
Farm insurance	3.63
Utilities	1.99
Dues & professional fees	0.67
Interest	33.64
Mach & bldg depreciation	24.08
Miscellaneous	3.95
Total overhead expenses per acre	72.23
Total dir & ovhd expenses per acre	233.38
Net return per acre	96.88
Government payments	6.20
Net return with govt pmts	103.09
Labor & management charge	22.97
Net return over lbr & mgt	80.11
<b>Cost of Production</b>	
Total direct expense per cwt.	7.92
Total dir & ovhd exp per cwt.	11.48
Less govt & other income	11.01
With labor & management	12.14
Net value per unit	16.08
Machinery cost per acre	61.90
Est. labor hours per acre	0.93

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

**Sunflowers on Cash Rent**

	<u>Avg. Of All Farms</u>
Number of farms	19
Acres	458.45
Yield per acre (cwt.)	20.32
Operators share of yield %	100.00
Value per cwt.	17.07
Total product return per acre	346.83
Crop insurance per acre	3.92
Other crop income per acre	0.07
Gross return per acre	350.82
<b>Direct Expenses</b>	
Seed	33.64
Fertilizer	38.63
Crop chemicals	37.30
Crop insurance	13.09
Fuel & oil	9.48
Repairs	18.14
Custom hire	12.98
Land rent	43.87
Operating interest	5.63
Total direct expenses per acre	213.03
Return over direct exp per acre	137.79
<b>Overhead Expenses</b>	
Custom hire	0.23
Hired labor	4.64
Machinery leases	3.57
Farm insurance	3.45
Utilities	2.30
Dues & professional fees	0.58
Interest	2.79
Mach & bldg depreciation	21.75
Miscellaneous	2.60
Total overhead expenses per acre	41.91
Total dir & ovhd expenses per acre	254.95
Net return per acre	95.88
Government payments	6.75
Net return with govt pmts	102.63
Labor & management charge	19.28
Net return over lbr & mgt	83.34
<b>Cost of Production</b>	
Total direct expense per cwt.	10.48
Total dir & ovhd exp per cwt.	12.55
Less govt & other income	12.02
With labor & management	12.97
Net value per unit	17.07
Machinery cost per acre	67.00
Est. labor hours per acre	1.01



**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
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**Wheat, Durum on Cash Rent**

	<u>Avg. Of All Farms</u>
Number of farms	5
Acres	1,014.68
Yield per acre (bu.)	46.34
Operators share of yield %	100.00
Value per bu.	6.28
Total product return per acre	291.10
Crop insurance per acre	12.66
Gross return per acre	303.76
<b>Direct Expenses</b>	
Seed	18.33
Fertilizer	58.57
Crop chemicals	36.62
Crop insurance	14.87
Fuel & oil	9.35
Repairs	16.47
Custom hire	10.21
Land rent	42.38
Operating interest	3.63
Miscellaneous	0.37
Total direct expenses per acre	210.80
Return over direct exp per acre	92.96
<b>Overhead Expenses</b>	
Hired labor	5.75
Machinery leases	2.75
Farm insurance	3.94
Utilities	2.44
Dues & professional fees	1.06
Interest	2.65
Mach & bldg depreciation	30.37
Miscellaneous	1.33
Total overhead expenses per acre	50.27
Total dir & ovhd expenses per acre	261.07
Net return per acre	42.69
Government payments	8.77
Net return with govt pmts	51.46
Labor & management charge	21.57
Net return over lbr & mgt	29.89
<b>Cost of Production</b>	
Total direct expense per bu.	4.55
Total dir & ovhd exp per bu.	5.63
Less govt & other income	5.17
With labor & management	5.64
Net value per unit	6.28
Machinery cost per acre	69.78
Est. labor hours per acre	0.98

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
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**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	26	5	5	6
Acres	324.28	94.54	425.25	409.08
Yield per acre (bu.)	38.45	9.83	43.80	36.74
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	4.60	4.83	4.39	4.75
Other product return per acre	8.32	18.44	-	24.90
Total product return per acre	185.34	65.88	192.25	199.24
Crop insurance per acre	22.30	20.40	-	47.55
Gross return per acre	207.64	86.28	192.25	246.79
<b>Direct Expenses</b>				
Seed	9.68	14.73	7.10	8.77
Fertilizer	50.75	29.68	54.82	44.79
Crop chemicals	25.83	16.92	27.63	26.97
Crop insurance	11.77	10.46	10.75	9.92
Fuel & oil	6.36	8.80	4.82	6.92
Repairs	11.72	18.91	11.89	10.58
Custom hire	4.45	9.22	2.35	2.88
Operating interest	2.78	3.12	1.86	5.01
Total direct expenses per acre	123.45	111.85	121.22	115.84
Return over direct exp per acre	84.19	-25.57	71.02	130.95
<b>Overhead Expenses</b>				
Hired labor	5.11	1.89	12.26	2.03
Machinery leases	0.67	0.29	0.56	0.24
RE & pers. property taxes	3.89	5.33	3.84	4.09
Farm insurance	3.79	2.67	2.19	3.87
Utilities	2.06	2.63	1.46	2.56
Dues & professional fees	0.36	0.95	0.22	0.66
Interest	15.91	15.91	14.85	19.77
Mach & bldg depreciation	25.33	9.92	20.78	26.85
Miscellaneous	5.44	4.42	3.69	4.75
Total overhead expenses per acre	62.57	44.00	59.86	64.83
Total dir & ovhd expenses per acre	186.02	155.85	181.08	180.67
Net return per acre	21.62	-69.57	11.17	66.12
Government payments	7.48	11.06	10.04	9.27
Net return with govt pmts	29.10	-58.51	21.20	75.39
Labor & management charge	16.55	24.89	12.60	14.80
Net return over lbr & mgt	12.55	-83.40	8.60	60.59
<b>Cost of Production</b>				
Total direct expense per bu.	3.21	11.38	2.77	3.15
Total dir & ovhd exp per bu.	4.84	15.85	4.13	4.92
Less govt & other income	3.85	10.78	3.91	2.69
With labor & management	4.28	13.31	4.19	3.10
Net value per unit	4.60	4.83	4.39	4.75
Machinery cost per acre	48.30	48.82	41.20	47.67
Est. labor hours per acre	0.96	1.36	0.81	0.79

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

**Wheat, Spring on Cash Rent**

	<u>Avg. Of</u> <u>All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	25	5	5	5
Acres	777.24	690.27	837.04	1,087.93
Yield per acre (bu.)	43.04	31.51	36.12	58.91
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	4.59	4.54	4.95	4.50
Other product return per acre	0.06	-	-	-
Total product return per acre	197.69	143.11	178.71	264.91
Crop insurance per acre	9.66	4.38	29.57	1.26
Gross return per acre	207.35	147.49	208.28	266.16
<b>Direct Expenses</b>				
Seed	12.53	13.11	12.79	12.62
Fertilizer	50.14	51.83	53.01	47.02
Crop chemicals	26.85	27.61	30.07	24.70
Crop insurance	10.87	13.71	8.43	11.12
Fuel & oil	6.76	7.65	6.99	6.42
Repairs	13.68	21.85	14.31	8.46
Custom hire	7.45	11.81	3.27	9.87
Land rent	42.20	39.17	41.21	45.70
Operating interest	5.64	10.82	6.51	3.83
Miscellaneous	0.48	-	-	1.37
Total direct expenses per acre	176.62	197.56	176.59	171.13
Return over direct exp per acre	30.73	-50.07	31.69	95.03
<b>Overhead Expenses</b>				
Custom hire	0.21	-	0.07	0.67
Hired labor	5.30	5.13	3.46	3.73
Machinery leases	2.31	5.75	1.71	0.79
Building leases	0.39	0.69	0.81	0.15
Farm insurance	3.01	2.85	4.09	2.55
Utilities	2.00	2.83	1.65	1.86
Dues & professional fees	0.50	0.26	1.43	0.35
Interest	4.00	9.76	2.82	1.47
Mach & bldg depreciation	22.16	23.99	17.32	28.99
Miscellaneous	2.68	2.07	3.14	3.07
Total overhead expenses per acre	42.56	53.34	36.50	43.62
Total dir & ovhd expenses per acre	219.18	250.90	213.09	214.76
Net return per acre	-11.83	-103.41	-4.81	51.41
Government payments	8.90	7.11	3.51	13.62
Net return with govt pmnts	-2.93	-96.30	-1.29	65.03
Labor & management charge	16.35	15.09	17.21	18.31
Net return over lbr & mgt	-19.28	-111.39	-18.50	46.72
<b>Cost of Production</b>				
Total direct expense per bu.	4.10	6.27	4.89	2.90
Total dir & ovhd exp per bu.	5.09	7.96	5.90	3.65
Less govt & other income	4.66	7.60	4.98	3.39
With labor & management	5.04	8.08	5.46	3.70
Net value per unit	4.59	4.54	4.95	4.50
Machinery cost per acre	55.29	78.86	45.75	56.18
Est. labor hours per acre	0.86	0.86	0.85	0.76

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

**Wheat, Spring on Share Rent**

	<u>Avg. Of All Farms</u>
Number of farms	7
Acres	396.90
Yield per acre (bu.)	35.95
Operators share of yield %	71.95
Value per bu.	4.57
Total product return per acre	118.23
Crop insurance per acre	1.32
Gross return per acre	119.54
<b>Direct Expenses</b>	
Seed	9.61
Fertilizer	51.28
Crop chemicals	28.46
Crop insurance	7.56
Fuel & oil	6.38
Repairs	11.69
Custom hire	3.07
Operating interest	1.82
Total direct expenses per acre	119.87
Return over direct exp per acre	-0.32
<b>Overhead Expenses</b>	
Hired labor	8.36
Machinery leases	0.26
Farm insurance	2.53
Utilities	1.32
Dues & professional fees	0.29
Interest	1.89
Mach & bldg depreciation	19.41
Miscellaneous	2.24
Total overhead expenses per acre	36.28
Total dir & ovhd expenses per acre	156.14
Net return per acre	-36.60
Government payments	6.82
Net return with govt pmts	-29.78
Labor & management charge	14.03
Net return over lbr & mgt	-43.81
<b>Cost of Production</b>	
Total direct expense per bu.	4.63
Total dir & ovhd exp per bu.	6.04
Less govt & other income	5.72
With labor & management	6.26
Net value per unit	4.57
Machinery cost per acre	40.93
Est. labor hours per acre	1.03

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

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

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>40 - 60%</u>		<u>High 20%</u>	
	25		5		5		5	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms								
Beef Calves sold (lb)	42.89	56.32	80.97	109.56	32.89	40.98	8.85	11.80
Transferred out (lb)	57.11	82.19	19.03	25.15	67.11	88.04	91.15	137.00
Cull sales		28.87		25.62		18.92		45.80
Other income		0.24		-		-		-
Purchased		-36.87		-49.34		-58.90		-9.27
Transferred in		-7.08		-		-5.58		-14.19
Inventory change		-8.21		-22.57		32.96		-33.33
Gross margin		115.47		88.41		116.41		137.80
<b>Direct Expenses</b>								
Protein Vit Minerals (lb.)	13.56	4.36	7.48	2.53	15.57	7.23	18.62	4.46
Aftermath Grazing (aum)	0.09	1.95	0.11	2.09	0.16	3.23	0.09	2.03
Corn Silage (lb.)	105.10	1.52	-	-	163.60	2.57	240.71	3.50
Hay, Alfalfa (lb.)	61.75	2.53	207.74	9.23	78.54	2.75	-	-
Hay, Grass (lb.)	956.14	28.29	832.58	25.58	875.76	29.45	692.11	19.10
Pasture (aum)	1.35	29.21	1.55	31.76	1.23	24.26	1.57	36.55
Cover crop forage (aum)	0.02	0.29	-	-	-	-	0.08	1.49
Other feed stuffs (lb)	33.48	1.94	7.94	0.66	36.21	0.64	16.46	1.32
Veterinary		3.18		4.10		4.48		2.56
Supplies		1.10		1.87		1.92		0.17
Fuel & oil		3.77		3.65		3.49		4.01
Repairs		8.33		8.38		7.93		5.23
Custom hire		0.54		0.39		0.58		0.64
Marketing		0.96		1.36		0.80		0.31
Operating interest		2.50		2.99		2.44		2.20
Total direct expenses		90.45		94.59		91.75		83.58
Return over direct expense		25.02		-6.18		24.67		54.22
<b>Overhead Expenses</b>								
Hired labor		2.22		5.91		0.14		2.34
Farm insurance		2.25		1.65		1.49		2.35
Utilities		2.07		1.64		2.17		2.13
Dues & professional fees		0.90		0.94		0.39		1.93
Interest		4.00		5.18		4.81		2.39
Mach & bldg depreciation		7.79		9.16		7.87		7.68
Miscellaneous		2.87		2.17		1.29		4.49
Total overhead expenses		22.08		26.65		18.14		23.30
Total dir & ovhd expenses		112.53		121.24		109.89		106.88
Net return		2.94		-32.83		6.52		30.92
Labor & management charge		13.65		14.42		12.64		12.79
Net return over lbr & mgt		-10.72		-47.25		-6.11		18.13
<b>Cost of Production Per Cwt. Produced</b>								
Total direct expense per unit		90.45		94.59		91.75		83.58
Total dir & ovhd expense per unit		112.53		121.24		109.89		106.88
With other revenue adjustments		135.70		167.53		122.49		117.87
With labor and management		149.35		181.96		135.12		130.66
Est. labor hours per unit		1.06		1.45		1.04		0.83
<b>Other Information</b>								
Number of cows		155.8		159.5		160.4		151.6
Pregnancy percentage		97.3		95.9		98.0		96.9
Pregnancy loss percentage		3.3		5.3		2.4		2.4
Culling percentage		14.5		16.8		11.0		18.6
Calving percentage		94.0		90.8		95.7		94.6
Weaning percentage		88.9		85.6		92.7		85.1
Calves sold per cow		0.94		0.90		0.98		0.98
Calf death loss percent		5.1		7.0		5.4		5.0
Cow death loss percent		2.4		3.8		2.7		2.0
Average weaning weight		551		537		536		535
Lb. weaned/exposed female		490		460		497		455
Feed cost per cow		355.27		350.85		358.87		346.88
Avg wgt/ Beef Calves sold		556		559		525		405
Avg price / cwt.		131.32		135.31		124.58		133.23

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

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

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>40 - 60%</u>		<u>High 20%</u>	
	25		5		5		5	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms								
Beef Calves sold (lb)	217.4	285.54	395.3	534.95	168.4	209.74	44.9	59.78
Transferred out (lb)	289.5	416.69	92.9	122.79	343.5	450.63	461.8	694.16
Cull sales		146.39		125.10		96.86		232.05
Other income		1.20		-		-		-
Purchased		-186.95		-240.93		-301.48		-46.97
Transferred in		-35.88		-		-28.55		-71.91
Inventory change		-41.61		-110.21		168.69		-168.88
Gross margin		585.39		431.69		595.88		698.22
<b>Direct Expenses</b>								
Protein Vit Minerals (lb.)	68.7	22.08	36.5	12.38	79.7	37.00	94.4	22.59
Aftermath Grazing (aum)	0.5	9.88	0.5	10.20	0.8	16.51	0.5	10.28
Corn Silage (lb.)	532.9	7.70	-	-	837.4	13.13	1,219.7	17.75
Hay, Alfalfa (lb.)	313.1	12.80	1,014.3	45.09	402.0	14.07	-	-
Hay, Grass (lb.)	4,847.4	143.41	4,065.3	124.88	4,482.7	150.72	3,506.9	96.79
Pasture (aum)	6.8	148.08	7.6	155.07	6.3	124.16	8.0	185.22
Cover crop forage (aum)	0.1	1.47	-	-	-	-	0.4	7.56
Other feed stuffs (lb)	169.7	9.84	38.8	3.25	185.4	3.26	83.4	6.70
Veterinary		16.11		20.01		22.93		12.99
Supplies		5.55		9.12		9.81		0.89
Fuel & oil		19.13		17.80		17.87		20.31
Repairs		42.24		40.92		40.58		26.51
Custom hire		2.72		1.91		2.99		3.23
Marketing		4.85		6.65		4.09		1.55
Operating interest		12.66		14.61		12.48		11.13
Total direct expenses		458.54		461.87		469.62		423.49
Return over direct expense		126.85		-30.18		126.26		274.72
<b>Overhead Expenses</b>								
Hired labor		11.23		28.84		0.70		11.83
Farm insurance		11.39		8.06		7.61		11.92
Utilities		10.51		8.01		11.09		10.77
Dues & professional fees		4.55		4.59		1.98		9.76
Interest		20.27		25.28		24.60		12.09
Mach & bldg depreciation		39.48		44.75		40.29		38.91
Miscellaneous		14.53		10.59		6.58		22.77
Total overhead expenses		111.95		130.11		92.86		118.05
Total dir & ovhd expenses		570.49		591.98		562.48		541.55
Net return		14.89		-160.29		33.40		156.67
Labor & management charge		69.22		70.43		64.68		64.80
Net return over lbr & mgt		-54.33		-230.72		-31.28		91.87
<b>Cost of Production Per Cwt. Produced</b>								
Total direct expense per unit		90.45		94.59		91.75		83.58
Total dir & ovhd expense per unit		112.53		121.24		109.89		106.88
With other revenue adjustments		135.70		167.53		122.49		117.87
With labor and management		149.35		181.96		135.12		130.66
Est. labor hours per unit		5.36		7.07		5.31		4.21
<b>Other Information</b>								
Number of cows		155.8		159.5		160.4		151.6
Pregnancy percentage		97.3		95.9		98.0		96.9
Pregnancy loss percentage		3.3		5.3		2.4		2.4
Culling percentage		14.5		16.8		11.0		18.6
Calving percentage		94.0		90.8		95.7		94.6
Weaning percentage		88.9		85.6		92.7		85.1
Calves sold per cow		0.94		0.90		0.98		0.98
Calf death loss percent		5.1		7.0		5.4		5.0
Cow death loss percent		2.4		3.8		2.7		2.0
Average weaning weight		551		537		536		535
Lb. weaned/exposed female		490		460		497		455
Feed cost per cow		355.27		350.85		358.87		346.88
Avg wgt/ Beef Calves sold		556		559		525		405
Avg price / cwt.		131.32		135.31		124.58		133.23

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

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

	<u>Avg. Of All Farms</u>	
Number of farms	6	
	Quantity	Value
Beef Calves sold (lb)	16.68	26.10
Transferred out (lb)	80.83	108.43
Cull sales		16.24
Other income		-
Purchased		-7.50
Transferred in		-26.68
Inventory change		-7.23
Gross margin		109.36
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	15.24	3.51
Complete Ration (lb.)	122.57	3.31
Corn (bu.)	0.76	2.29
Corn Silage (lb.)	619.81	9.54
Hay, Grass (lb.)	729.55	19.15
Pasture (aum)	0.99	21.33
Other feed stuffs (lb)	71.92	3.93
Veterinary		6.03
Supplies		0.75
Fuel & oil		2.62
Repairs		7.50
Custom hire		3.24
Machinery leases		1.08
Marketing		1.87
Operating interest		2.15
Total direct expenses		88.29
Return over direct expense		21.07
<b>Overhead Expenses</b>		
Hired labor		0.71
Farm insurance		2.03
Utilities		0.89
Dues & professional fees		0.52
Interest		2.85
Mach & bldg depreciation		7.30
Miscellaneous		4.24
Total overhead expenses		18.53
Total dir & ovhd expenses		106.82
Net return		2.53
Labor & management charge		13.59
Net return over lbr & mgt		-11.06
<b>Cost of Production Per Cwt. Produced</b>		
Total direct expense per unit		88.29
Total dir & ovhd expense per unit		106.82
With other revenue adjustments		118.69
With labor and management		132.29
Est. labor hours per unit		0.95
<b>Other Information</b>		
Number of cows		143.5
Pregnancy percentage		97.7
Pregnancy loss percentage		0.6
Culling percentage		10.3
Calving percentage		97.2
Weaning percentage		92.7
Calves sold per cow		0.93
Calf death loss percent		4.6
Cow death loss percent		1.6
Average weaning weight		556
Lb. weaned/exposed female		515
Feed cost per cow		442.17
Avg wgt/ Beef Calves sold		763
Avg price / cwt.		156.48



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

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

	<u>Avg. Of</u>	
	<u>All Farms</u>	
Number of farms	6	
	Quantity	Value
Beef Calves sold (lb)	117.0	183.03
Transferred out (lb)	566.8	760.32
Cull sales		113.86
Other income		-
Purchased		-52.62
Transferred in		-187.11
Inventory change		-50.69
Gross margin		766.80
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	106.9	24.62
Complete Ration (lb.)	859.5	23.23
Corn (bu.)	5.3	16.07
Corn Silage (lb.)	4,346.1	66.91
Hay, Grass (lb.)	5,115.6	134.26
Pasture (aum)	6.9	149.55
Other feed stuffs (lb)	504.3	27.53
Veterinary		42.31
Supplies		5.25
Fuel & oil		18.34
Repairs		52.56
Custom hire		22.70
Machinery leases		7.55
Marketing		13.12
Operating interest		15.06
Total direct expenses		619.07
Return over direct expense		147.73
<b>Overhead Expenses</b>		
Hired labor		4.96
Farm insurance		14.24
Utilities		6.21
Dues & professional fees		3.62
Interest		19.99
Mach & bldg depreciation		51.18
Miscellaneous		29.76
Total overhead expenses		129.96
Total dir & ovhd expenses		749.03
Net return		17.77
Labor & management charge		95.30
Net return over lbr & mgt		-77.53
<b>Cost of Production Per Cwt. Produced</b>		
Total direct expense per unit		88.29
Total dir & ovhd expense per unit		106.82
With other revenue adjustments		118.69
With labor and management		132.29
Est. labor hours per unit		6.67
<b>Other Information</b>		
Number of cows		143.5
Pregnancy percentage		97.7
Pregnancy loss percentage		0.6
Culling percentage		10.3
Calving percentage		97.2
Weaning percentage		92.7
Calves sold per cow		0.93
Calf death loss percent		4.6
Cow death loss percent		1.6
Average weaning weight		556
Lb. weaned/exposed female		515
Feed cost per cow		442.17
Avg wgt/ Beef Calves sold		763
Avg price / cwt.		156.48

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

	<u>Avg. Of All Farms</u>	
Number of farms	5	
	Quantity	Value
Beef Calves sold (lb)	24.37	31.37
Transferred out (lb)	75.63	98.35
Other income		-
Gross margin		129.72
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	21.09	7.02
Aftermath Grazing (aum)	0.14	3.15
Corn Silage (lb.)	121.96	1.80
Hay, Grass (lb.)	1,044.37	32.53
Pasture (aum)	0.99	12.54
Other feed stuffs (lb)	1.09	0.11
Veterinary		5.32
Supplies		1.06
Fuel & oil		2.96
Repairs		6.60
Livestock leases		46.08
Marketing		0.53
Operating interest		3.07
Total direct expenses		122.77
Return over direct expense		6.95
<b>Overhead Expenses</b>		
Custom hire		0.27
Hired labor		0.07
Farm insurance		1.23
Utilities		2.13
Interest		3.82
Mach & bldg depreciation		7.35
Miscellaneous		2.04
Total overhead expenses		16.92
Total dir & ovhd expenses		139.69
Net return		-9.97
Labor & management charge		10.16
Net return over lbr & mgt		-20.13
<b>Cost of Production Per Cwt. Produced</b>		
Total direct expense per unit		122.77
Total dir & ovhd expense per unit		139.69
With other revenue adjustments		139.69
With labor and management		149.85
Est. labor hours per unit		0.87
<b>Other Information</b>		
Number of cows		76.2
Pregnancy percentage		98.5
Pregnancy loss percentage		0.3
Culling percentage		20.2
Calving percentage		98.2
Weaning percentage		93.3
Calves sold per cow		1.08
Calf death loss percent		5.2
Cow death loss percent		1.6
Average weaning weight		563
Lb. weaned/exposed female		525
Feed cost per cow		305.83
Avg wgt/ Beef Calves sold		523
Avg price / cwt.		128.72

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

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

	<u>Avg. Of</u>	
	<u>All Farms</u>	
Number of farms	5	
	Quantity	Value
Beef Calves sold (lb)	130.4	167.84
Transferred out (lb)	404.7	526.26
Other income		-
Gross margin		694.10
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	112.9	37.58
Aftermath Grazing (aum)	0.8	16.87
Corn Silage (lb.)	652.6	9.65
Hay, Grass (lb.)	5,588.2	174.09
Pasture (aum)	5.3	67.07
Other feed stuffs (lb)	5.8	0.57
Veterinary		28.46
Supplies		5.66
Fuel & oil		15.84
Repairs		35.34
Livestock leases		246.56
Marketing		2.83
Operating interest		16.40
Total direct expenses		656.93
Return over direct expense		37.17
<b>Overhead Expenses</b>		
Custom hire		1.47
Hired labor		0.36
Farm insurance		6.60
Utilities		11.39
Interest		20.44
Mach & bldg depreciation		39.35
Miscellaneous		10.91
Total overhead expenses		90.52
Total dir & ovhd expenses		747.45
Net return		-53.35
Labor & management charge		54.37
Net return over lbr & mgt		-107.71
<b>Cost of Production Per Cwt. Produced</b>		
Total direct expense per unit		122.77
Total dir & ovhd expense per unit		139.69
With other revenue adjustments		139.69
With labor and management		149.85
Est. labor hours per unit		4.66
<b>Other Information</b>		
Number of cows		76.2
Pregnancy percentage		98.5
Pregnancy loss percentage		0.3
Culling percentage		20.2
Calving percentage		98.2
Weaning percentage		93.3
Calves sold per cow		1.08
Calf death loss percent		5.2
Cow death loss percent		1.6
Average weaning weight		563
Lb. weaned/exposed female		525
Feed cost per cow		305.83
Avg wgt/ Beef Calves sold		523
Avg price / cwt.		128.72

**Livestock Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2016**  
**(Farms Sorted By Net Return)**

**Beef Replacement Heifers -- Average Per Head**

	<u>Avg. Of All Farms</u>	
Number of farms	16	
	Quantity	Value
Beef Replace sold (hd)	0.06	58.32
Transferred out (hd)	1.01	1,343.74
Cull sales (hd)	0.02	15.72
Other income		-
Purchased (hd)	0.02	-11.48
Transferred in (hd)	0.62	-523.10
Inventory change (hd)	-0.44	-482.61
Gross margin		400.59
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	59.95	17.79
Aftermath Grazing (aum)	0.19	4.15
Barley (bu.)	0.31	0.76
Corn (bu.)	9.70	29.87
Corn Silage (lb.)	1,338.76	19.94
Hay, Alfalfa (lb.)	27.25	0.79
Hay, Grass (lb.)	2,927.10	82.17
Pasture (aum)	4.46	96.85
DDGS, dry (lb.)	105.10	6.71
Other feed stuffs (lb)	164.37	4.32
Veterinary		16.09
Supplies		0.57
Fuel & oil		5.77
Repairs		10.02
Custom hire		4.80
Operating interest		3.55
Total direct expenses		304.15
Return over direct expense		96.43
<b>Overhead Expenses</b>		
Hired labor		1.88
Farm insurance		3.36
Utilities		3.29
Dues & professional fees		1.36
Interest		4.80
Mach & bldg depreciation		11.76
Miscellaneous		6.19
Total overhead expenses		32.65
Total dir & ovhd expenses		336.80
Net return		63.79
Labor & management charge		20.86
Net return over lbr & mgt		42.93
Est. labor hours per unit		1.54
<b>Other Information</b>		
No. purchased or trans in		21
Number sold or trans out		34
Average number of head		32
Percentage death loss		0.2
Feed cost per average head		263.36
Feed cost/head sold/trans		246.91

**Livestock Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2016**  
**(Farms Sorted By Net Return)**

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

	<u>Avg. Of All Farms</u>	
Number of farms	16	
	Quantity	Value
Beef Replace sold (hd)	0.1	54.68
Transferred out (hd)	0.9	1,259.85
Cull sales (hd)	0.0	14.74
Other income		-
Purchased (hd)	0.0	-10.77
Transferred in (hd)	0.6	-490.44
Inventory change (hd)	-0.4	-452.49
Gross margin		375.58
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	56.2	16.68
Aftermath Grazing (aum)	0.2	3.89
Barley (bu.)	0.3	0.72
Corn (bu.)	9.1	28.01
Corn Silage (lb.)	1,255.2	18.69
Hay, Alfalfa (lb.)	25.5	0.75
Hay, Grass (lb.)	2,744.4	77.04
Pasture (aum)	4.2	90.80
DDGS, dry (lb.)	98.5	6.30
Other feed stuffs (lb)	154.1	4.05
Veterinary		15.08
Supplies		0.53
Fuel & oil		5.41
Repairs		9.39
Custom hire		4.50
Operating interest		3.33
Total direct expenses		285.17
Return over direct expense		90.41
<b>Overhead Expenses</b>		
Hired labor		1.77
Farm insurance		3.15
Utilities		3.09
Dues & professional fees		1.27
Interest		4.50
Mach & bldg depreciation		11.03
Miscellaneous		5.81
Total overhead expenses		30.61
Total dir & ovhd expenses		315.78
Net return		59.80
Labor & management charge		19.56
Net return over lbr & mgt		40.25
Est. labor hours per unit		1.45
<b>Other Information</b>		
No. purchased or trans in		21
Number sold or trans out		34
Average number of head		32
Percentage death loss		0.2
Feed cost per average head		263.36
Feed cost/head sold/trans		246.91

**Livestock Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2016**  
**(Farms Sorted By Net Return)**

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

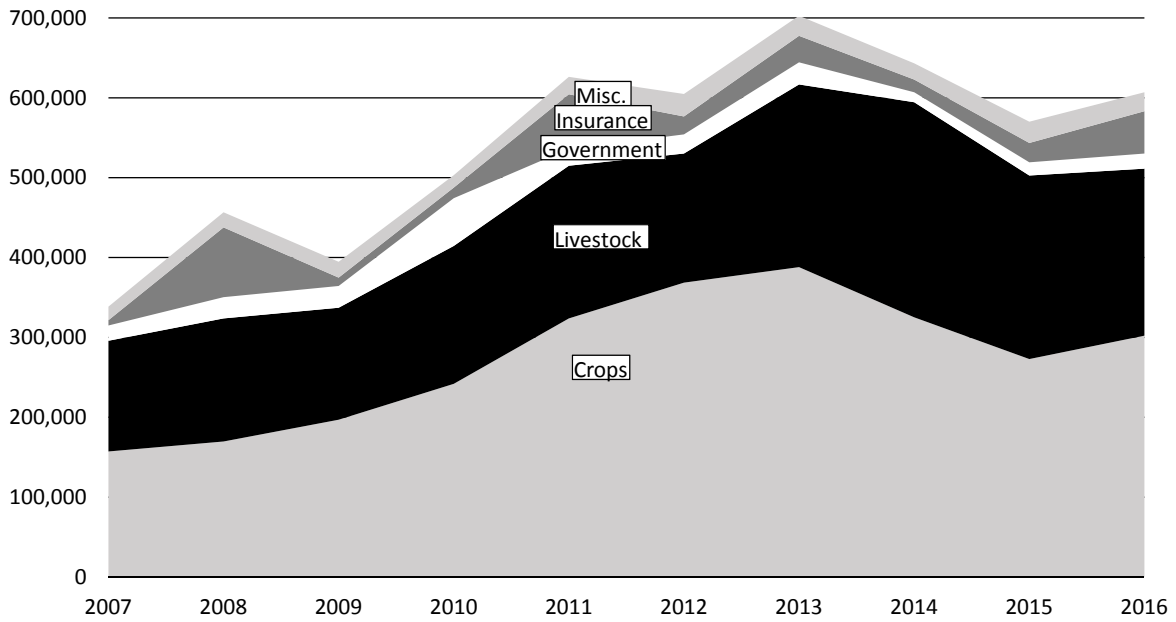
	<u>Avg. Of All Farms</u>	
Number of farms	8	
	Quantity	Value
Backgnd Beef sold (lb)	336.48	480.62
Transferred out (lb)	92.07	118.88
Other income		-
Transferred in (lb)	-289.57	-373.88
Inventory change (lb)	-38.99	-115.01
Gross margin		110.61
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	12.71	5.41
Creep / Starter (lb.)	30.38	3.49
Corn (bu.)	7.89	22.95
Corn Silage (lb.)	619.14	9.48
Hay, Grass (lb.)	549.05	15.73
Oats (bu.)	0.04	0.10
Straw (lb.)	27.89	0.55
DDGS, dry (lb.)	62.31	3.72
Cover crop forage (aum)	0.13	2.30
Other feed stuffs (lb)	1.08	3.76
Veterinary		0.92
Fuel & oil		2.33
Repairs		6.02
Custom hire		2.07
Marketing		6.04
Operating interest		3.33
Total direct expenses		88.23
Return over direct expense		22.39
<b>Overhead Expenses</b>		
Hired labor		1.41
Utilities		1.10
Dues & professional fees		0.66
Interest		3.35
Mach & bldg depreciation		6.14
Miscellaneous		2.17
Total overhead expenses		14.85
Total dir & ovhd expenses		103.07
Net return		7.54
Labor & management charge		7.04
Net return over lbr & mgt		0.50
<b>Cost of Production Per Cwt. Produced</b>		
Total direct expense per unit		134.67
Total dir & ovhd expense per unit		138.13
With other revenue adjustments		138.13
With labor and management		139.77
Est. labor hours per unit		0.58
<b>Other Information</b>		
No. purchased or trans in		98
Number sold or trans out		113
Percentage death loss		0.5
Avg. daily gain (lb.)		1.36
Lb. of conc / lb. of gain		5.97
Lb. of feed / lb. of gain		13.80
Feed cost per cwt. of gain		67.51
Feed cost per head		94.27
Avg wgt / Backgnd Beef sold		708
Avg sales price / cwt.		142.84

**Livestock Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 4 - Western North Dakota, 2016**  
**(Farms Sorted By Net Return)**

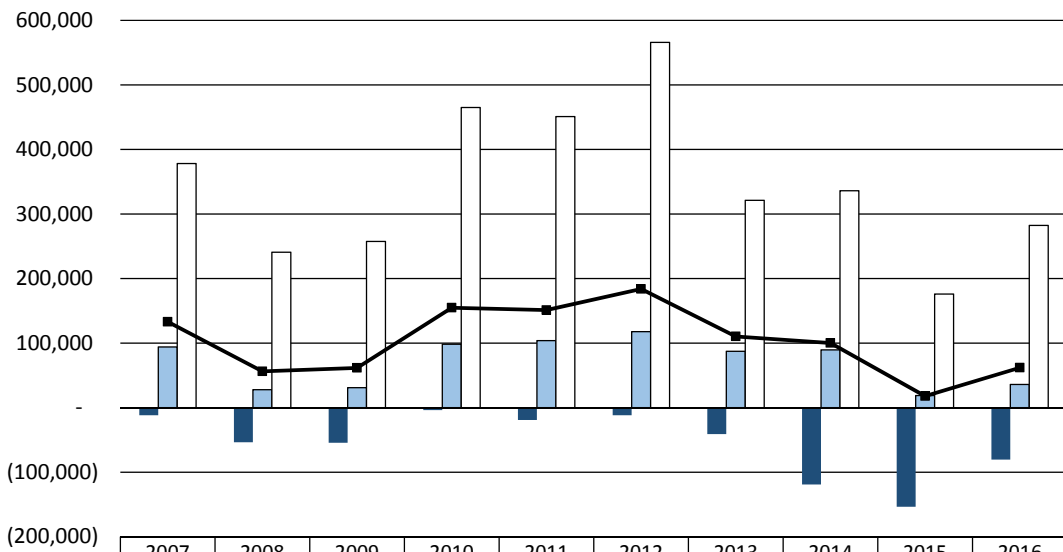
**Beef Backgrounding -- Average Per Head**

	<u>Avg. Of</u>	
	<u>All Farms</u>	
Number of farms	8	
	Quantity	Value
Backgnd Beef sold (lb)	469.9	671.17
Transferred out (lb)	128.6	166.02
Other income		-
Transferred in (lb)	-404.4	-522.11
Inventory change (lb)	-54.4	-160.61
Gross margin		154.47
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	17.7	7.56
Creep / Starter (lb.)	42.4	4.88
Corn (bu.)	11.0	32.05
Corn Silage (lb.)	864.6	13.24
Hay, Grass (lb.)	766.7	21.96
Oats (bu.)	0.1	0.14
Pasture (aum)	0.1	1.74
Straw (lb.)	38.9	0.77
DDGS, dry (lb.)	87.0	5.20
Cover crop forage (aum)	0.2	3.21
Other feed stuffs (lb)	1.4	3.52
Veterinary		1.29
Fuel & oil		3.26
Repairs		8.41
Custom hire		2.89
Marketing		8.44
Operating interest		4.64
Total direct expenses		123.20
Return over direct expense		31.26
<b>Overhead Expenses</b>		
Hired labor		1.97
Dues & professional fees		0.93
Interest		4.68
Mach & bldg depreciation		8.58
Miscellaneous		4.58
Total overhead expenses		20.73
Total dir & ovhd expenses		143.94
Net return		10.53
Labor & management charge		9.83
Net return over lbr & mgt		0.70
<b>Cost of Production Per Cwt. Produced</b>		
Total direct expense per unit		134.67
Total dir & ovhd expense per unit		138.13
With other revenue adjustments		138.13
With labor and management		139.77
Est. labor hours per unit		0.81
<b>Other Information</b>		
No. purchased or trans in		98
Number sold or trans out		113
Percentage death loss		0.5
Avg. daily gain (lb.)		1.36
Lb. of conc / lb. of gain		5.97
Lb. of feed / lb. of gain		13.80
Feed cost per cwt. of gain		67.51
Feed cost per head		94.27
Avg wgt / Backgnd Beef sold		708
Avg sales price / cwt.		142.84

**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

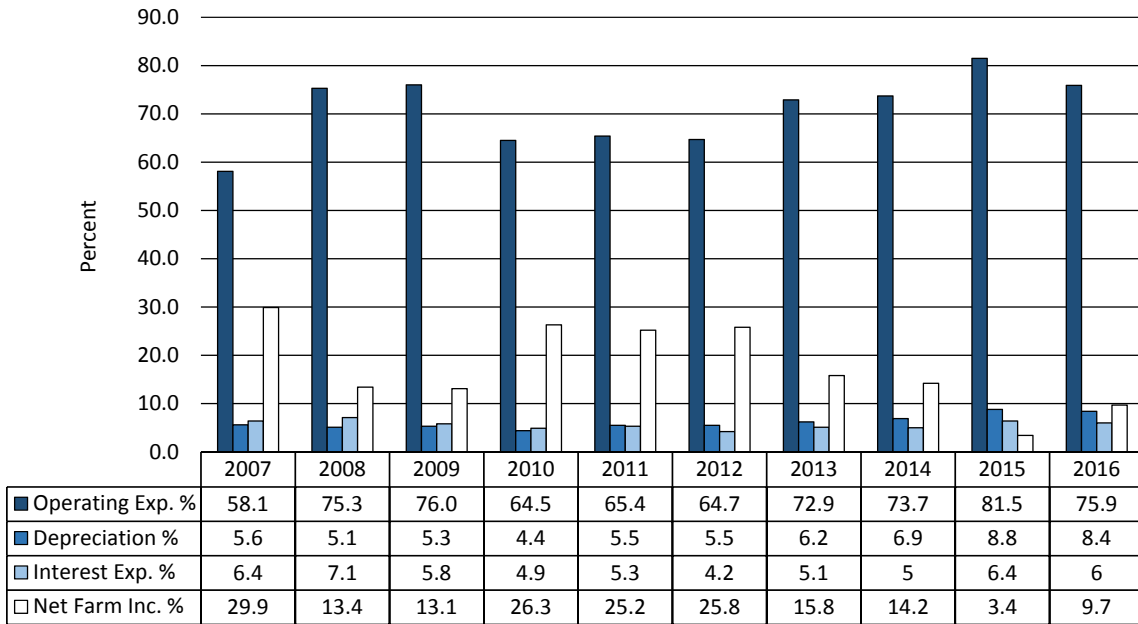


	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
20% Low Profit	(11,874)	(53,651)	(54,455)	(3,912)	(19,132)	(11,839)	(41,038)	(119,185)	(153,690)	(80,547)
Middle 60% Profit	94,092	27,879	30,862	98,236	103,851	117,677	87,315	89,422	18,780	35,876
20% High Profit	378,203	240,757	257,480	465,002	450,998	565,893	321,189	335,974	175,995	282,325
Average of All	132,990	56,199	61,573	154,809	151,100	183,863	110,311	100,155	17,838	61,881



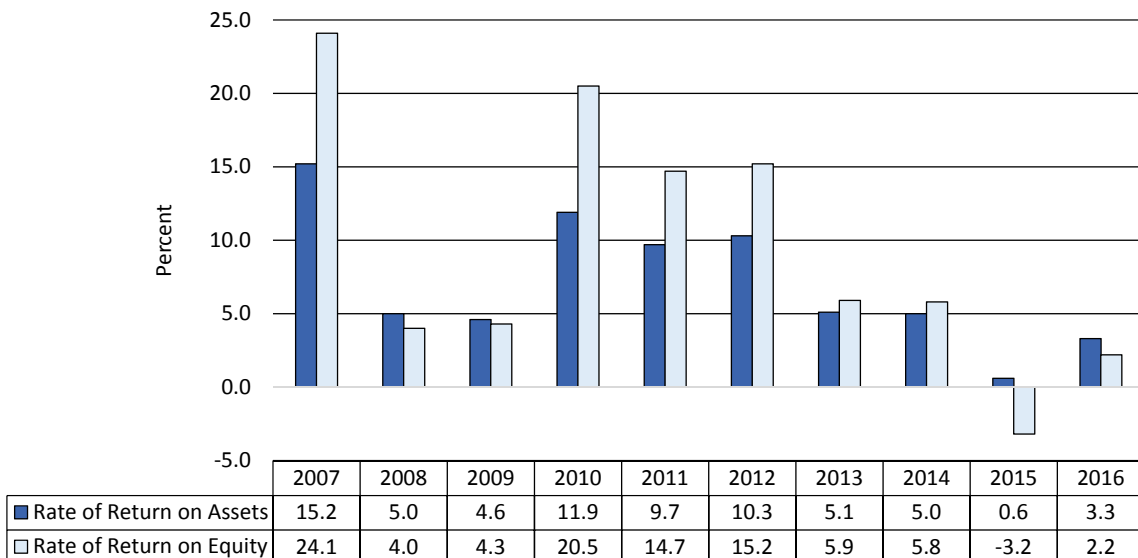
### Figure 3. Financial Efficiency Measures (As Percent of Gross Revenue)

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



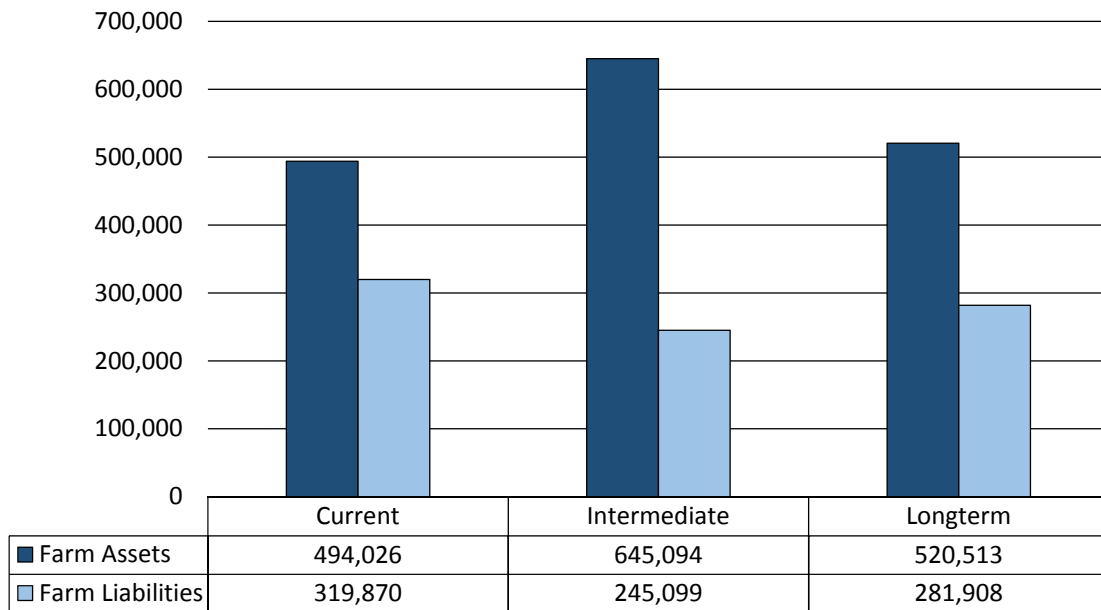
### Figure 4. Profitability Measures Per Farm

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



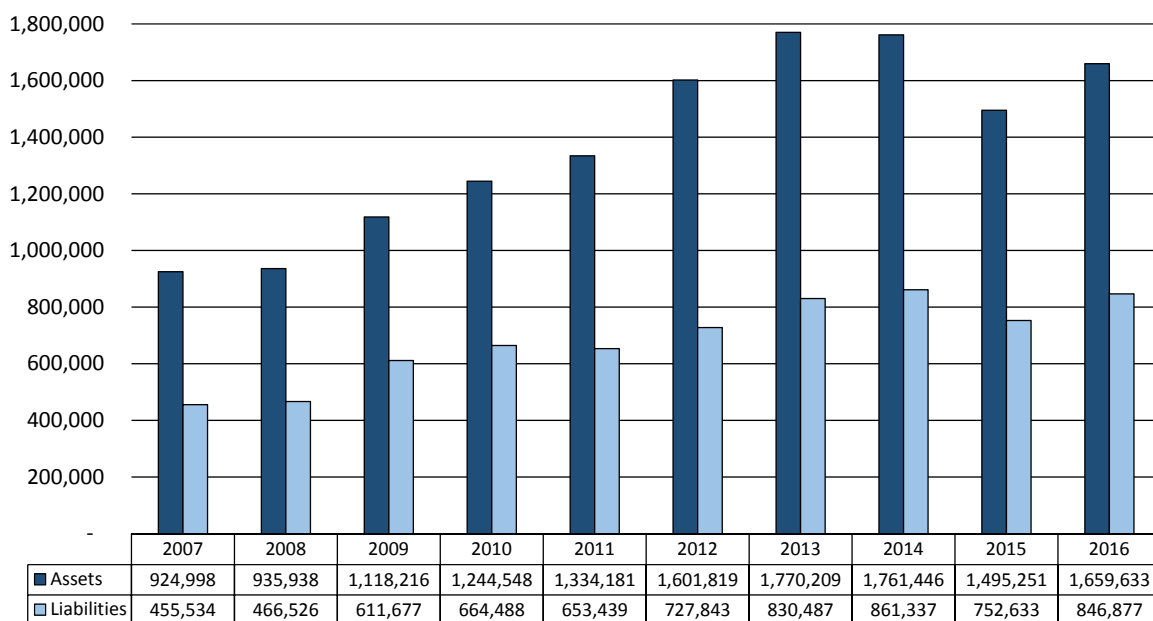
## Figure 5. Assets and Liabilities Per Farm, 2016

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



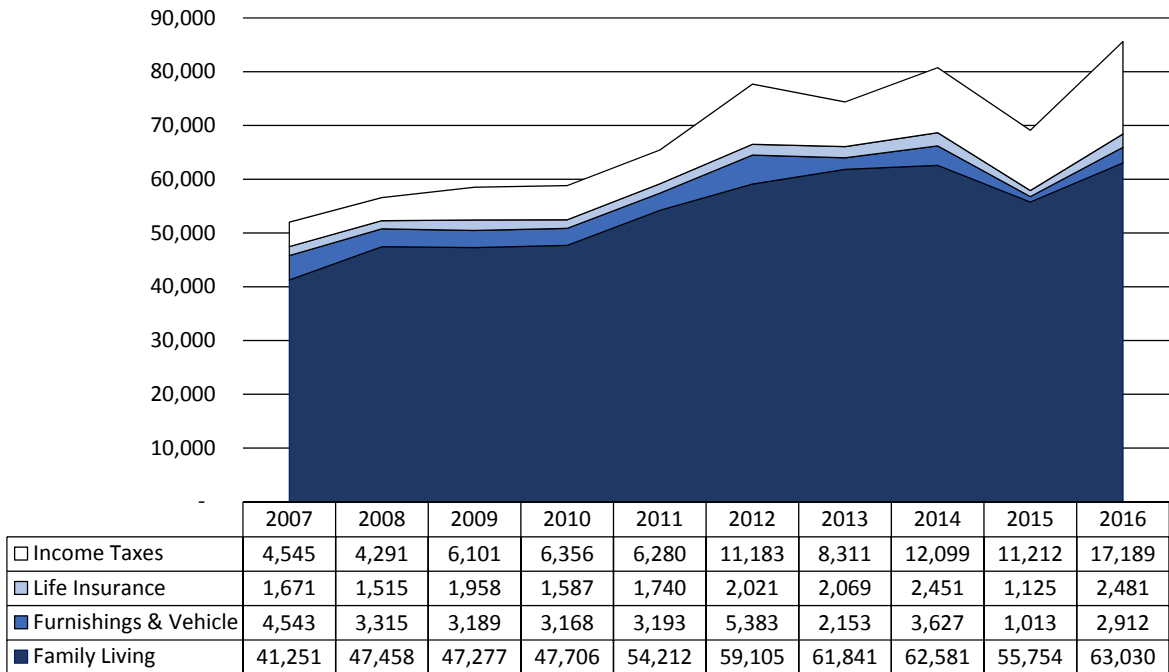
## Figure 6. Total Farm Assets and Liabilities

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



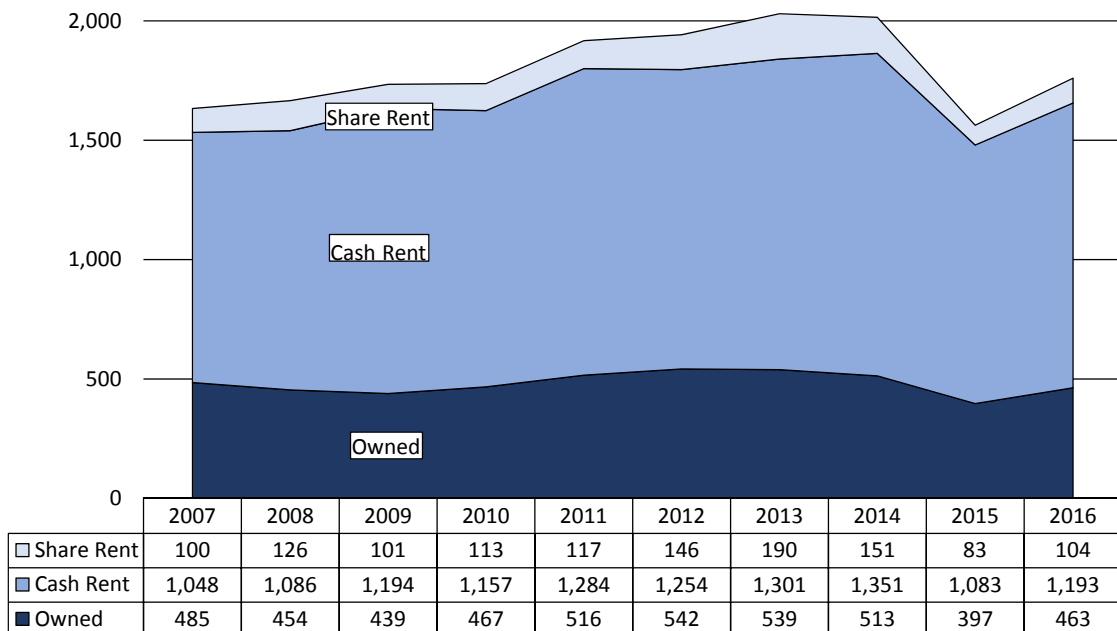
## Figure 7. Household and Personal Expenses

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



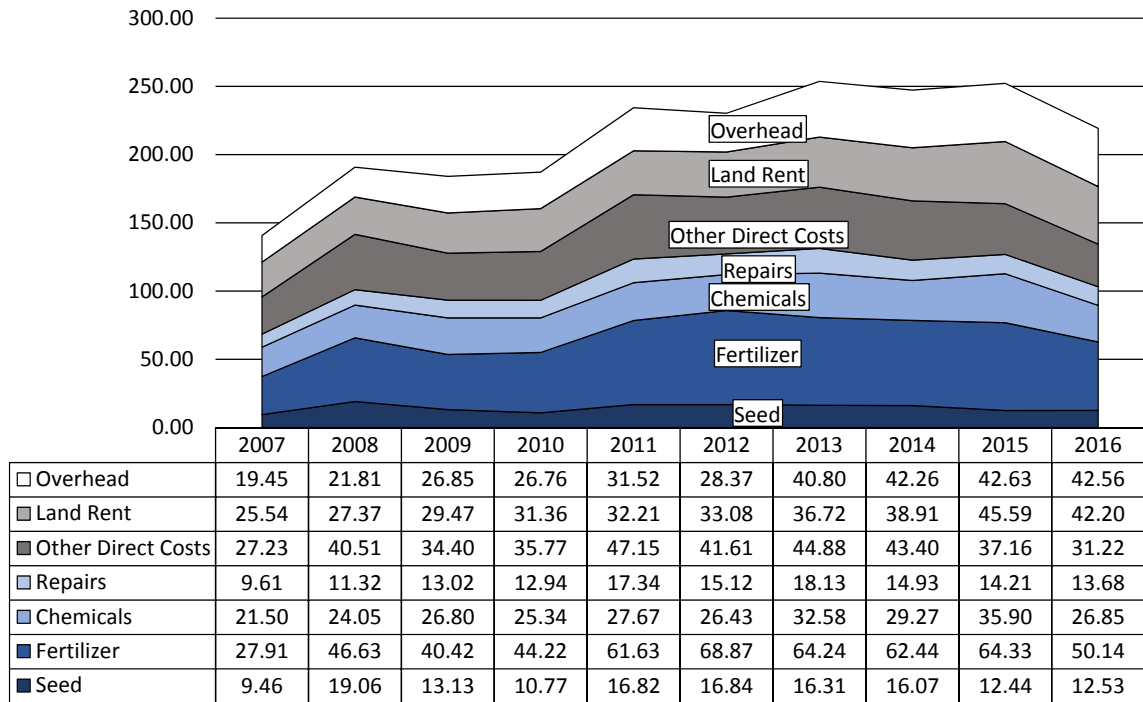
## Figure 8. Crop Acreage Per Farm

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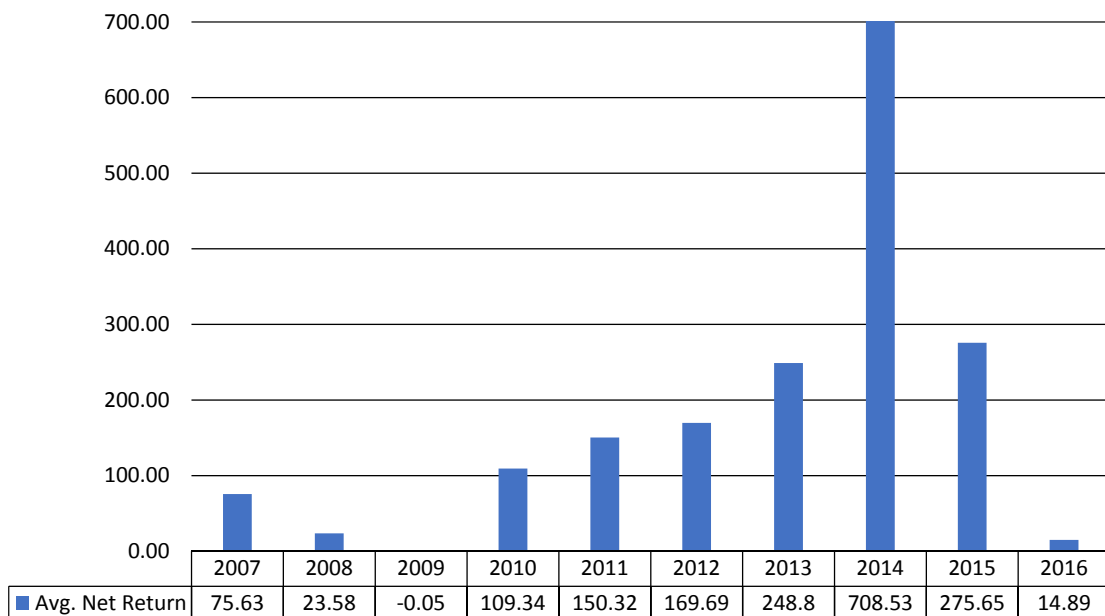
## Figure 9. Spring Wheat Costs Per Acre

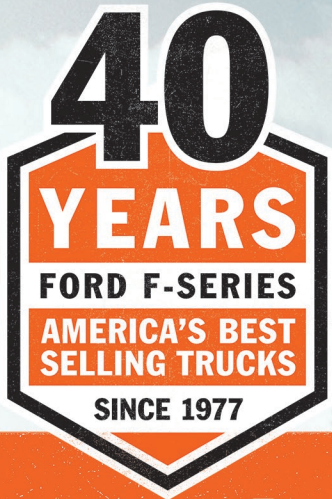
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## Figure 10. Average Net Return Per Beef Cow

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