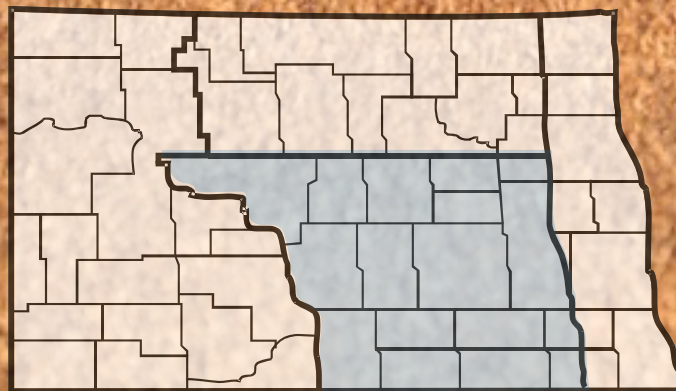


2017 ANNUAL REPORT

South Central North Dakota

North Dakota Farm and Ranch Business
Management Education



www.ndfarmmanagement.com



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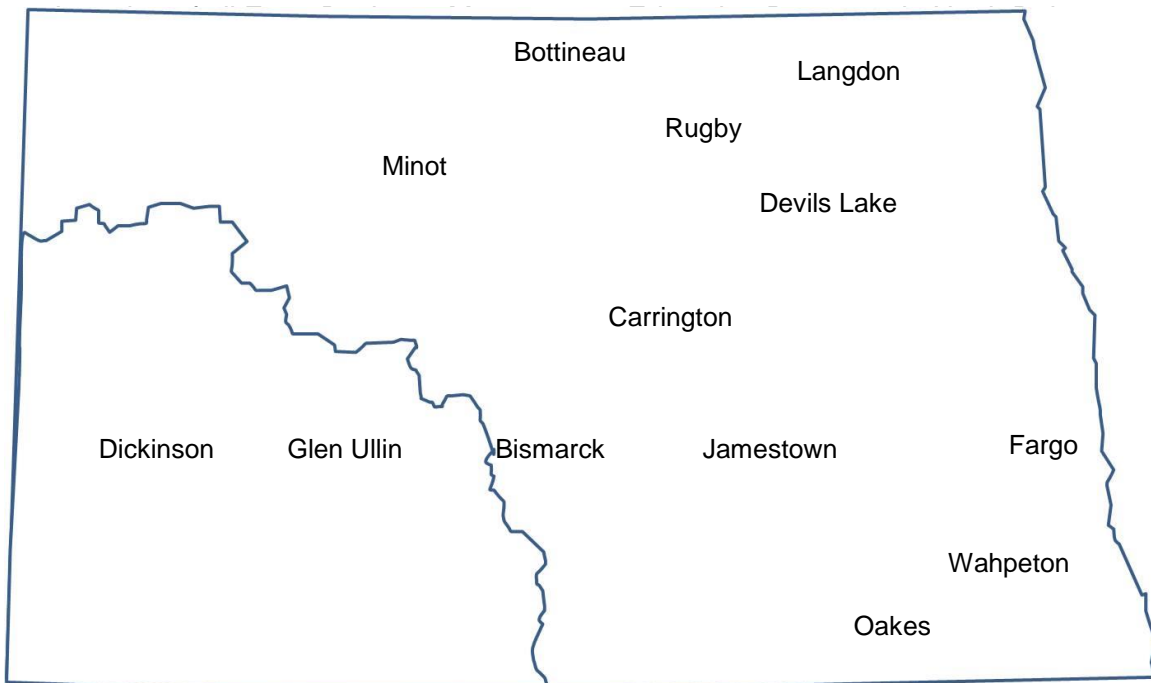
NORTH DAKOTA FARM BUSINESS MANAGEMENT EDUCATION

REGION 3 – SOUTH CENTRAL AVERAGES 2017 ANNUAL REPORT

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

<u>School</u>	<u>Instructor</u>
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Carrington High School	Steve Metzger
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Oakes (JVCTC)	Kacey Holm
Wahpeton (NDSCS)	Kara Froelich

This report was made possible by the farm families who cooperated with their farm management instructors in getting the records for 2017 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.



2017 South Central Report
North Dakota Farm Business Management Education

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INTRODUCTION

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

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

The 2017 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 29th 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.

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 "Crop government payments", which are ARC and PLC payments; "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; "CRP payments," and "Other government payments" which refers to all other government payments such as EQIP reimbursements, CSP payments and disaster payments.

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

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

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

Inventory Changes

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

Depreciation

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

Profitability Measures

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

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

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

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

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

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

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

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

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

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

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

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

Liquidity & Repayment Capacity Measures

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

Balance Sheets

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

Statement of Cash Flows

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

Financial Standards Measures

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

Liquidity

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

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

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

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

Solvency

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

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

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

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

Profitability

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

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

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

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

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

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

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

Repayment Capacity

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

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

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

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

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

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

Efficiency

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

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

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

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

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

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

Crop Production and Marketing Summary

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

Household and Personal Expenses

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

Operator and Labor Information

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

Nonfarm Summary

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

Farm Income Statement
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	134	26	27	27
Cash Farm Income				
Barley	27,297	1,161	-	113,898
Beans, Navy	103	-	-	509
Beans, Pinto	29,509	12,249	28,791	64,749
Canola	7,537	-	-	31,967
Corn	162,037	159,833	78,799	378,608
CRP	104	-	-	517
Hay, Alfalfa	481	2,479	-	-
Hay, Mixed	349	225	488	25
Peas, Field	8,202	3,868	305	21,567
Rye	411	1,119	137	12
Soybeans	239,666	185,776	101,709	534,491
Stover	60	310	-	-
Sunflowers	6,108	18,440	-	8,001
Sunflowers, Confectionary	3,306	-	-	7,451
Wheat, Durum	9,279	6,904	1,964	33,082
Wheat, Spring	111,838	37,667	51,436	282,932
Wheat, Winter	1,839	2,266	-	6,601
Rented Out	1,695	2,096	1,957	3,073
Miscellaneous crop income	3,421	2,264	4,955	5,769
Beef Cow-Calf, Beef Calves	31,301	30,744	56,620	24,039
Beef Replacement Heifers	4,332	1,406	14,630	5,515
Beef Backgrounding	21,603	18,686	14,833	49,885
Beef Finishing	2,853	11,033	3,535	-
Beef Finish Yearlings	2,159	3,801	-	-
Beef Stockers	1,110	-	-	5,511
Dairy, Milk	27,922	143,907	-	-
Dairy, Dairy Calves	427	2,203	-	-
Dairy Finishing	60	311	-	-
Sheep, Feeder Lamb Prod, Fdr Lambs	168	864	-	-
Sheep, Market Lamb Prod, Mkt Lambs	215	206	-	-
Cull breeding livestock	9,142	14,696	7,182	15,335
Misc. livestock income	4,439	53	28	14,516
Crop government payments	20,436	9,138	8,017	48,164
CRP payments	1,797	525	1,167	4,369
Other government payments	10,706	4,156	10,120	25,430
Custom work income	11,335	2,120	21,469	11,613
Patronage dividends, cash	3,289	5,767	971	6,511
Crop insurance income	32,446	12,804	12,634	96,444
Property insurance income	2,297	4,627	1,728	2,344
Sale of resale items	169	871	-	-
Livestock insurance inc	636	-	306	2,852
Other farm income	11,723	17,195	6,411	22,776
Gross Cash Farm Income	813,806	721,768	430,191	1,828,555

Farm Income Statement (continued)
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	134	26	27	27
Cash Farm Expense				
Seed and plants	106,011	77,959	49,608	245,196
Fertilizer	83,250	57,787	47,685	200,414
Crop chemicals	61,550	43,842	24,664	132,758
Crop insurance	25,442	26,015	13,949	56,440
Drying expense	2,672	1,751	1,871	4,706
Storage	1,717	2,220	551	3,335
Irrigation energy	982	852	146	2,472
Crop miscellaneous	8,112	2,535	917	33,107
Consultants	1,419	3	-	5,646
Feeder livestock purchase	12,807	28,782	17,978	5,544
Purchased feed	19,198	51,567	17,114	9,530
Breeding fees	719	2,128	354	184
Veterinary	4,369	10,102	3,089	3,749
Supplies	3,536	12,406	862	3,083
Interest	38,624	48,567	21,601	61,892
Fuel & oil	28,225	28,760	17,167	55,611
Repairs	52,836	62,386	31,786	96,293
Custom hire	13,031	12,884	8,363	24,693
Hired labor	29,653	58,819	2,778	59,570
Land rent	109,092	101,222	50,442	234,920
Machinery leases	10,425	10,540	4,552	12,518
Building leases	456	611	93	1,532
Real estate taxes	5,662	6,800	3,973	9,867
Farm insurance	12,199	15,064	6,188	24,219
Utilities	10,188	13,135	6,355	18,819
Hauling and trucking	1,141	5,878	-	-
Marketing	1,391	3,013	980	746
Dues & professional fees	3,199	3,654	1,081	8,638
Miscellaneous	12,896	10,495	9,433	27,338
Total cash expense	660,796	699,781	343,578	1,342,819
Net cash farm income	153,009	21,987	86,612	485,736
Inventory Changes				
Prepays and supplies	11,643	-16,885	8,504	35,303
Accounts receivable	7,177	-5,580	6,245	37,552
Hedging accounts	-982	-3,828	-524	1,193
Other current assets	-236	-261	59	952
Crops and feed	14,334	-16,712	-20,026	73,215
Market livestock	17,392	22,192	10,139	18,287
Breeding livestock	-3,082	-9,531	5,421	-9,885
Other assets	-3,857	-504	185	-21,283
Accounts payable	-4,325	-610	4,443	-10,310
Accrued interest	-2,144	-8,866	509	-2,978
Total inventory change	35,921	-40,585	14,957	122,046
Net operating profit	188,931	-18,599	101,569	607,781
Depreciation				
Machinery and equipment	-57,812	-34,659	-23,938	-152,035
Titled vehicles	-4,613	-4,620	-3,565	-10,424
Buildings and improvements	-7,043	-3,162	-2,015	-25,282
Total depreciation	-69,468	-42,441	-29,518	-187,741
Net farm income from operations	119,463	-61,040	72,051	420,041
Gain or loss on capital sales	-2,749	-16,031	-413	1,923
Net farm income	116,714	-77,071	71,638	421,964

Inventory Changes
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	134	26	27	27
Net cash farm income	153,009	21,987	86,612	485,736
Crops and Feed				
Ending inventory	626,902	412,142	187,175	1,852,068
Beginning inventory	612,568	428,853	207,200	1,778,853
Inventory change	14,334	-16,712	-20,026	73,215
Market Livestock				
Ending inventory	64,395	75,231	77,664	86,684
Beginning inventory	47,003	53,039	67,526	68,396
Inventory change	17,392	22,192	10,139	18,287
Accts Receivable				
Ending inventory	32,845	23,374	20,609	96,599
Beginning inventory	25,668	28,954	14,363	59,047
Inventory change	7,177	-5,580	6,245	37,552
Prepaid Expenses and Supplies				
Ending inventory	77,075	20,900	31,485	240,162
Beginning inventory	65,432	37,785	22,980	204,859
Inventory change	11,643	-16,885	8,504	35,303
Hedging Activities				
Ending inventory	4,659	3,469	781	14,094
Withdrawals	2,330	1,685	7	6,622
Beginning inventory	5,103	4,413	1,004	12,953
Deposits	2,867	4,569	308	6,570
Gain or loss	-982	-3,828	-524	1,193
Other Current Assets				
Ending inventory	3,820	12,862	167	4,816
Beginning inventory	4,057	13,123	107	3,864
Inventory change	-236	-261	59	952
Breeding Livestock				
Ending inventory	117,704	148,033	137,817	167,997
Capital sales	3,681	6,805	6,340	74
Beginning inventory	108,856	148,041	124,090	169,169
Capital purchases	15,611	16,329	14,645	8,788
Depreciation, capital adjust	-3,082	-9,531	5,421	-9,885
Other Capital Assets				
Ending inventory	69,317	75,030	8,858	221,381
Capital sales	1,441	-	-	3,373
Beginning inventory	53,810	75,124	8,674	143,180
Capital purchases	20,805	411	-	102,857
Depreciation, capital adjust	-3,857	-504	185	-21,283
Accounts Payable				
Beginning inventory	17,693	27,027	18,714	17,888
Ending inventory	22,018	27,637	14,271	28,198
Inventory change	-4,325	-610	4,443	-10,310
Accrued Interest				
Beginning inventory	16,096	24,206	10,023	22,097
Ending inventory	18,239	33,072	9,514	25,075
Inventory change	-2,144	-8,866	509	-2,978
Total inventory change	35,921	-40,585	14,957	122,046
Net operating profit	188,931	-18,599	101,569	607,781

Depreciation
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	134	26	27	27
Net operating profit	188,931	-18,599	101,569	607,781
Machinery and Equipment				
Ending inventory	658,763	584,904	310,460	1,526,275
Capital sales	14,187	35,329	3,198	14,801
Beginning inventory	645,243	621,228	281,630	1,431,375
Capital purchases	85,518	33,663	55,967	261,735
Depreciation, capital adjust.	-57,812	-34,659	-23,938	-152,035
Titled Vehicles				
Ending inventory	44,415	36,695	30,075	93,603
Capital sales	1,224	1,823	-	3,350
Beginning inventory	41,808	41,399	26,884	82,655
Capital purchases	8,445	1,738	6,755	24,722
Depreciation, capital adjust.	-4,613	-4,620	-3,565	-10,424
Buildings and Improvements				
Ending inventory	249,027	236,414	91,582	705,222
Capital sales	-	-	-	-
Beginning inventory	233,721	229,375	88,323	659,120
Capital purchases	22,349	10,202	5,274	71,383
Depreciation, capital adjust.	-7,043	-3,162	-2,015	-25,282
Total depreciation, capital adj.	-69,468	-42,441	-29,518	-187,741
Net farm income from operations	119,463	-61,040	72,051	420,041
Gain or loss on capital sales	-2,749	-16,031	-413	1,923
Net farm income	116,714	-77,071	71,638	421,964

Profitability Measures
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	134	26	27	27
Profitability (assets valued at cost)				
Net farm income from operations	119,463	-61,040	72,051	420,041
Rate of return on assets	3.9 %	-1.8 %	4.3 %	6.0 %
Rate of return on equity	3.9 %	-8.1 %	4.8 %	7.0 %
Operating profit margin	13.0 %	-7.3 %	14.4 %	19.3 %
Asset turnover rate	30.3 %	24.5 %	29.9 %	30.8 %
Farm interest expense	40,768	57,433	21,091	64,870
Value of operator lbr and mgmt.	54,633	42,116	36,121	115,569
Return on farm assets	105,597	-45,722	57,022	369,342
Average farm assets	2,685,035	2,562,524	1,324,800	6,205,613
Return on farm equity	64,830	-103,156	35,930	304,472
Average farm equity	1,648,869	1,276,177	741,722	4,333,695
Value of farm production	812,343	627,332	396,539	1,913,581

Liquidity & Repayment Capacity Measures
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	134	26	27	27
Liquidity				
Current ratio	1.63	1.20	1.51	2.11
Working capital	225,086	82,718	115,100	721,237
Working capital to gross inc	33.9 %	18.3 %	26.4 %	48.4 %
Current assets	583,658	487,635	340,322	1,373,820
Current liabilities	358,572	404,917	225,222	652,583
Gross revenues (accrual)	664,408	451,680	435,493	1,491,117
Repayment capacity				
Net farm income from operations	119,463	-61,040	72,051	420,041
Depreciation	69,468	42,441	29,518	187,741
Personal income	42,112	86,092	34,864	16,519
Family living/owner withdrawals	-62,419	-66,710	-45,390	-98,091
Cash discrepancy	-256	-45	-722	-307
Payments on personal debt	-3,629	-3,286	-3,767	-3,422
Income taxes paid	-13,061	-13,938	-5,075	-24,858
Interest on term debt	24,487	39,631	16,647	32,426
Capital debt repayment capacity	176,420	23,190	98,847	530,355
Scheduled term debt payments	-98,281	-97,863	-76,343	-168,863
Capital debt repayment margin	78,138	-74,674	22,504	361,492
Cash replacement allowance	-40,197	-40,786	-9,391	-110,223
Replacement margin	37,942	-115,460	13,114	251,269
Term debt coverage ratio	1.80	0.24	1.29	3.14
Replacement coverage ratio	1.27	0.17	1.15	1.90

Balance Sheet at Cost Values
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(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	122	23	26	19
Assets				
Current Farm Assets				
Cash and checking balance	30,633	58,707	20,449	28,182
Prepaid expenses & supplies	49,440	17,750	32,541	122,481
Growing crops	407	-	135	169
Accounts receivable	17,804	12,386	21,401	36,936
Hedging accounts	3,856	3,917	811	11,932
Crops held for sale or feed	418,245	306,675	191,471	1,092,868
Market livestock held for sale	61,695	82,225	73,476	78,402
Other current assets	1,578	5,975	39	2,850
Total current farm assets	583,658	487,635	340,322	1,373,820
Intermediate Farm Assets				
Breeding livestock	94,979	80,002	136,052	133,875
Machinery and equipment	514,331	428,046	314,632	1,118,319
Titled vehicles	33,862	24,945	31,232	57,217
Other intermediate assets	8,651	16,872	2,319	3,241
Total intermediate farm assets	651,823	549,864	484,235	1,312,653
Long Term Farm Assets				
Farm land	737,625	771,985	456,508	1,501,952
Buildings and improvements	175,167	190,168	92,825	467,051
Other long-term assets	16,575	36,166	6,880	22,938
Total long-term farm assets	929,368	998,319	556,214	1,991,941
Total Farm Assets	2,164,850	2,035,818	1,380,771	4,678,414
Total Nonfarm Assets	271,787	380,198	194,308	318,413
Total Assets	2,436,637	2,416,016	1,575,079	4,996,828
Liabilities				
Current Farm Liabilities				
Accrued interest	16,213	29,316	9,750	21,051
Accounts payable	21,024	20,824	14,722	32,524
Current notes	259,056	315,255	150,071	461,667
Principal due on term debt	62,279	39,522	50,679	137,341
Total current farm liabilities	358,572	404,917	225,222	652,583
Total intermediate farm liabs	145,113	113,236	129,544	237,240
Total long term farm liabilities	413,494	481,210	251,438	820,240
Total farm liabilities	917,180	999,363	606,204	1,710,064
Total nonfarm liabilities	48,412	55,932	32,438	67,718
Total liabilities	965,591	1,055,295	638,642	1,777,782
Net worth (farm and nonfarm)	1,471,045	1,360,722	936,436	3,219,046
Net worth change	73,818	-48,773	64,634	277,223
Percent net worth change	5 %	-3 %	7 %	9 %
Ratio Analysis				
Current farm liabilities / assets	61 %	83 %	66 %	48 %
Intermediate farm liab. / assets	22 %	21 %	27 %	18 %
Long term farm liab. / assets	44 %	48 %	45 %	41 %
Total debt to asset ratio	40 %	44 %	41 %	36 %

Statement Of Cash Flows
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	134	26	27	27
Beginning cash (farm & nonfarm)	44,491	84,969	13,396	54,549
Cash Provided By Operating Activities				
Gross cash farm income	813,806	721,768	430,191	1,828,555
Total cash farm expense	-660,796	-699,781	-343,578	-1,342,819
Net cash from hedging transactions	-538	-2,884	-301	52
Cash provided by operating	152,472	19,103	86,312	485,788
Cash Provided By Investing Activities				
Sale of breeding livestock	3,681	6,805	6,340	74
Sale of machinery & equipment	11,238	19,563	2,785	15,798
Sale of titled vehicles	1,425	1,557	-	4,276
Sale of farm land	6,947	-	-	34,479
Sale of farm buildings	-	-	-	-
Sale of other farm assets	1,441	-	-	3,373
Sale of nonfarm assets	2,374	2,885	2,670	415
Purchase of breeding livestock	-15,611	-16,329	-14,645	-8,788
Purchase of machinery & equip.	-85,518	-33,663	-55,967	-261,735
Purchase of titled vehicles	-8,445	-1,738	-6,755	-24,722
Purchase of farm land	-38,973	-714	-	-118,460
Purchase of farm buildings	-22,349	-10,202	-5,274	-71,383
Purchase of other farm assets	-20,805	-411	-	-102,857
Purchase of nonfarm assets	-15,998	-13,729	-6,582	-24,263
Cash provided by investing	-180,593	-45,976	-77,428	-553,793
Cash Provided By Financing Activities				
Money borrowed	740,534	596,565	372,679	1,746,410
Principal payments	-680,843	-573,514	-357,519	-1,584,309
Personal income	42,112	86,092	34,864	16,519
Family living/owner withdrawals	-62,411	-66,710	-45,390	-98,091
Income and social security tax	-12,970	-14,553	-5,000	-23,888
Capital contributions	-	-	-	-
Capital distributions	-1,002	-5,165	-	-
Dividends paid	-8	-	-	-
Cash gifts and inheritances	1,457	216	1,066	2,246
Gifts given	-457	-2,353	-	-
Other cash flows	-	-	-	-
Cash provided by financing	26,412	20,578	700	58,887
Net change in cash balance	-1,709	-6,294	9,584	-9,119
Ending cash (farm & nonfarm)	42,526	78,630	22,258	45,124
Discrepancy	256	45	722	307

Financial Standards Measures
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	134	26	27	27
Liquidity				
Current ratio	1.63	1.20	1.51	2.11
Working capital	225,086	82,718	115,100	721,237
Working capital to gross inc	33.9 %	18.3 %	26.4 %	48.4 %
Solvency (cost)				
Farm debt to asset ratio	42 %	49 %	44 %	37 %
Farm equity to asset ratio	58 %	51 %	56 %	63 %
Farm debt to equity ratio	0.74	0.96	0.78	0.58
Profitability (cost)				
Rate of return on farm assets	3.9 %	-1.8 %	4.3 %	6.0 %
Rate of return on farm equity	3.9 %	-8.1 %	4.8 %	7.0 %
Operating profit margin	13.0 %	-7.3 %	14.4 %	19.3 %
Net farm income	116,714	-77,071	71,638	421,964
EBITDA	229,699	38,834	122,660	672,651
Repayment Capacity				
Capital debt repayment capacity	176,420	23,190	98,847	530,355
Capital debt repayment margin	78,138	-74,674	22,504	361,492
Replacement margin	37,942	-115,460	13,114	251,269
Term debt coverage ratio	1.80	0.24	1.29	3.14
Replacement coverage ratio	1.27	0.17	1.15	1.90
Efficiency				
Asset turnover rate (cost)	30.3 %	24.5 %	29.9 %	30.8 %
Operating expense ratio	72.8 %	94.5 %	71.6 %	65.1 %
Depreciation expense ratio	8.2 %	6.0 %	6.8 %	9.7 %
Interest expense ratio	4.8 %	8.1 %	4.9 %	3.4 %
Net farm income ratio	13.8 %	-10.9 %	16.6 %	21.9 %

Crop Production and Marketing Summary
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	134	26	27	27
Acreage Summary				
Total acres owned	895	991	540	1,855
Total crop acres	2,051	1,576	981	4,694
Crop acres owned	518	483	318	979
Crop acres cash rented	1,490	1,091	634	3,658
Crop acres share rented	43	1	29	57
Total pasture acres	535	345	635	1,056
Percent crop acres owned	25 %	31 %	32 %	21 %
Mach invest/crop acre cost	336	400	329	334
Average Price Received (Cash Sales Only)				
Soybeans per bushel	8.93	9.06	8.84	9.00
Corn per bushel	2.95	2.72	3.09	2.97
Wheat, Spring per bushel	5.42	4.65	5.56	5.29
Beans, Pinto per cwt	26.77	-	-	28.78
Barley per bushel	5.08	-	-	5.21
Peas, Field per bushel	6.82	-	-	-
Canola per cwt	16.98	-	-	17.36
Wheat, Durum per bushel	7.01	-	-	7.22
Sunflowers per cwt	16.41	-	-	-
Flax per bushel	9.51	-	-	-
Wheat, Winter per bushel	4.71	-	-	-
Average Yield Per Acre				
Soybeans (bushel)	36.83	34.80	36.03	38.11
Wheat, Spring (bushel)	45.06	45.36	45.32	44.81
Corn (bushel)	143.20	144.94	144.24	151.84
Pasture (aum)	1.03	1.05	0.940	1.17
Beans, Pinto (cwt)	16.92	14.65	17.23	17.66
Hay, Grass (ton)	1.42	-	1.10	1.48
Canola (cwt)	14.55	-	-	14.05
Hay, Mixed Alfalfa/Grass (ton)	0.927	-	0.845	0.820
Hay, Small Grain (ton)	2.18	-	-	1.74
Barley (bushel)	75.66	-	-	77.85
Hay, Alfalfa (ton)	2.71	-	-	1.95
Sunflowers (cwt)	16.12	11.98	-	15.89
Corn Silage (ton)	17.26	-	-	-
Wheat, Durum (bushel)	46.93	41.96	-	50.76
Hay, Mixed (ton)	2.25	-	-	-
Peas, Field (bushel)	36.27	-	-	38.80

Household and Personal Expenses
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	35	8	10
Average family size	2.8	2.3	2.5
Family Living Expenses			
Food and meals expense	8,571	8,546	7,497
Medical care	5,505	4,192	6,213
Health insurance	9,943	10,716	14,057
Cash donations	2,514	2,532	3,057
Household supplies	7,685	8,438	8,019
Clothing	2,042	1,694	1,983
Personal care	7,532	6,787	10,697
Child / Dependent care	303	-	128
Alimony and child support	-	-	-
Gifts	1,927	2,373	2,360
Education	1,357	284	989
Recreation	4,680	5,817	5,419
Utilities (household share)	3,212	2,232	4,589
Personal vehicle operating exp	2,362	1,242	2,097
Household real estate taxes	924	2,178	826
Dwelling rent	168	-	-
Household repairs	2,013	4,037	1,482
Personal interest	1,104	1,055	1,738
Disability / Long term care ins	214	-	29
Life insurance payments	2,975	1,557	4,576
Personal property insurance	379	1,018	125
Miscellaneous	1,751	1,227	3,091
Total cash family living expense	67,160	65,924	78,967
Family living from the farm	197	330	226
Total family living	67,357	66,254	79,193
Other Nonfarm Expenditures			
Income taxes	22,303	33,790	22,886
Furnishing & appliance purchases	121	-	303
Nonfarm vehicle purchases	7,003	4,142	14,935
Nonfarm real estate purchases	2,409	1,250	7,433
Other nonfarm capital purchases	2,101	-	4,961
Nonfarm savings & investments	6,148	4,268	9,950
Total other nonfarm expenditures	40,085	43,450	60,468
Total cash family living investment & nonfarm capital purch	107,245	109,373	139,435

Operator and Labor Information
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	134	26	27	27
Operator Information				
Average number of operators	1.1	1.1	1.0	1.3
Average age of operators	45.1	52.6	44.0	45.1
Average number of years farming	20.9	27.0	20.0	23.1
Results Per Operator				
Working capital	358,187	104,083	113,224	1,054,475
Total assets (cost)	2,735,222	2,585,589	1,488,752	5,064,895
Total liabilities	1,012,279	1,219,416	598,798	1,515,001
Net worth (cost)	1,722,943	1,366,173	889,955	3,549,893
Gross farm income	764,477	634,473	416,216	1,446,491
Total farm expense	656,314	689,198	346,738	1,131,460
Net farm income from operations	108,162	-54,725	69,478	315,030
Net nonfarm income	38,129	77,186	33,619	12,389
Family living & tax withdrawals	68,572	72,345	49,359	92,442
Total acres owned	810.6	888.3	520.4	1,390.9
Total crop acres	1,857.0	1,412.8	946.1	3,520.5
Crop acres owned	469.2	433.0	306.6	734.1
Crop acres cash rented	1,349.3	978.5	611.3	2,743.8
Crop acres share rented	38.5	1.3	28.2	42.6
Total pasture acres	484.5	309.0	612.1	792.3
Labor Analysis				
Number of farms	134	26	27	27
Total unpaid labor hours	1,808	1,358	1,789	2,763
Total hired labor hours	1,301	3,081	92	2,337
Total labor hours per farm	3,109	4,438	1,881	5,100
Unpaid hours per operator	1,637	1,217	1,725	2,072

Nonfarm Summary
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	134	26	27	27
Nonfarm Income				
Personal wages & salary	26,023	36,722	25,449	9,527
Net nonfarm business income	6,086	25,841	2,733	248
Personal rental income	3,379	13,981	2,189	361
Personal interest income	493	248	12	2,100
Personal cash dividends	245	771	23	-
Tax refunds	406	257	1,128	11
Other nonfarm income	5,480	8,271	3,331	4,272
Total nonfarm income	42,112	86,092	34,864	16,519
Gifts and inheritances	1,457	216	1,066	2,246

Financial Summary
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(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>	<u>Over</u> <u>2,000,000</u>
Number of farms	134	17	21	26	39	18	13
Income Statement							
Gross cash farm income	813,806	45,603	183,820	378,678	702,994	1,404,294	3,221,140
Total cash farm expense	660,796	76,479	171,604	336,588	548,270	1,071,383	2,632,629
Net cash farm income	153,009	-30,876	12,216	42,090	154,724	332,911	588,511
Inventory change	35,921	37,178	26,449	42,445	-4,524	36,146	157,558
Depreciation	-69,468	-6,021	-11,056	-25,878	-50,265	-135,910	-299,589
Net farm income from operations	119,463	281	27,609	58,658	99,935	233,146	446,480
Gain or loss on capital sales	-2,749	-4	-531	-	-1,565	-48	-22,710
Average net farm income	116,714	277	27,077	58,658	98,370	233,098	423,770
Median net farm income	75,045	6,110	33,263	67,937	109,569	243,205	377,564
Profitability (cost)							
Rate of return on assets	3.9 %	-0.7 %	2.4 %	3.9 %	3.8 %	4.4 %	4.1 %
Rate of return on equity	3.9 %	-4.8 %	1.7 %	3.3 %	3.7 %	5.2 %	4.0 %
Operating profit margin	13.0 %	-3.6 %	9.4 %	11.8 %	14.1 %	14.8 %	12.4 %
Asset turnover rate	30.3 %	19.9 %	25.9 %	33.0 %	26.9 %	30.1 %	33.2 %
Liquidity & Repayment (end of year)							
Current assets	583,658	79,057	186,127	350,337	596,894	1,323,572	2,248,101
Current liabilities	358,572	82,897	98,633	210,805	398,867	680,203	1,446,756
Current ratio	1.63	0.95	1.89	1.66	1.50	1.95	1.55
Working capital	225,086	-3,840	87,495	139,533	198,027	643,369	801,344
Change in working capital	25,555	4,728	14,838	18,920	9,588	74,216	122,667
Working capital to gross inc	33.9 %	-4.4 %	39.3 %	32.8 %	28.7 %	45.2 %	31.4 %
Term debt coverage ratio	1.80	1.52	1.82	1.55	1.35	1.55	2.69
Replacement coverage ratio	1.27	1.25	1.55	1.18	0.99	1.16	1.63
Term debt to EBITDA	2.59	5.86	4.85	2.89	3.25	2.72	1.72
Solvency (end of year at cost)							
Number of sole proprietors	122	17	21	24	39	14	7
Total assets	2,436,637	510,970	1,037,890	1,398,772	2,790,850	5,133,115	7,501,452
Total liabilities	965,591	224,438	387,520	549,062	1,076,896	2,077,490	3,083,926
Net worth	1,471,045	286,532	650,369	849,710	1,713,955	3,055,625	4,417,526
Net worth change	73,818	31,341	48,988	49,423	58,701	168,605	229,756
Farm debt to asset ratio	42 %	49 %	44 %	40 %	42 %	43 %	42 %
Total debt to asset ratio	40 %	44 %	37 %	39 %	39 %	40 %	41 %
Change in earned net worth %	5 %	12 %	8 %	6 %	4 %	6 %	5 %
Nonfarm Information							
Net nonfarm income	42,112	57,712	73,081	30,924	40,448	20,990	28,301
Farms reporting living expenses	35	1	6	5	16	3	4
Total family living expense	67,357	-	39,704	46,759	71,543	-	-
Crop Acres							
Total crop acres	2,051	154	521	1,043	1,824	3,394	7,841
Total crop acres owned	518	69	146	258	660	716	
Total crop acres cash rented	1,490	69	323	769	1,118	2,559	1,528
Total crop acres share rented	43	15	52	16	46	119	6,314
Machinery value per crop acre	336	403	315	311	327	378	325

Financial Summary
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(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	134	26	27	24	28	29
Income Statement						
Gross cash farm income	813,806	347,707	691,694	878,850	1,413,888	712,158
Total cash farm expense	660,796	308,317	602,640	717,116	1,149,448	512,546
Net cash farm income	153,009	39,390	89,054	161,734	264,440	199,612
Inventory change	35,921	50,400	55,907	23,718	44,045	6,590
Depreciation	-69,468	-14,812	-56,515	-73,518	-125,647	-72,936
Net farm income from operations	119,463	74,978	88,446	111,934	182,838	133,265
Gain or loss on capital sales	-2,749	-	-2,570	1,367	-11,645	-198
Average net farm income	116,714	74,978	85,876	113,301	171,192	133,067
Median net farm income	75,045	42,539	84,585	80,349	129,828	65,272
Profitability (cost)						
Rate of return on assets	3.9 %	8.7 %	3.7 %	4.5 %	3.4 %	3.6 %
Rate of return on equity	3.9 %	16.2 %	3.8 %	4.7 %	3.0 %	3.6 %
Operating profit margin	13.0 %	15.6 %	9.7 %	12.5 %	12.6 %	16.1 %
Asset turnover rate	30.3 %	55.8 %	38.5 %	36.2 %	27.0 %	22.2 %
Liquidity & Repayment (end of year)						
Current assets	583,658	241,013	605,927	480,835	1,112,914	494,586
Current liabilities	358,572	164,396	412,693	297,406	683,249	245,976
Current ratio	1.63	1.47	1.47	1.62	1.63	2.01
Working capital	225,086	76,617	193,234	183,429	429,665	248,609
Change in working capital	25,555	3,315	-4,780	7,351	116,135	8,520
Working capital to gross inc	33.9 %	19.3 %	26.5 %	30.3 %	39.3 %	48.0 %
Term debt coverage ratio	1.80	2.13	1.30	1.83	1.76	2.23
Replacement coverage ratio	1.27	1.82	1.14	1.37	1.22	1.26
Term debt to EBITDA	2.59	2.42	2.66	2.29	2.65	2.73
Solvency (end of year at cost)						
Number of sole proprietors	122	26	26	20	24	26
Total assets	2,436,637	831,036	2,057,312	2,005,677	4,312,012	3,021,953
Total liabilities	965,591	487,704	957,178	879,018	1,663,697	874,083
Net worth	1,471,045	343,333	1,100,135	1,126,659	2,648,315	2,147,870
Net worth change	73,818	57,933	49,357	74,085	115,514	75,470
Farm debt to asset ratio	42 %	60 %	48 %	47 %	40 %	34 %
Total debt to asset ratio	40 %	59 %	47 %	44 %	39 %	29 %
Change in earned net worth %	5 %	20 %	5 %	7 %	5 %	4 %
Nonfarm Information						
Net nonfarm income	42,112	20,161	41,758	52,069	28,890	66,649
Farms reporting living expenses	35	5	4	4	10	12
Total family living expense	67,357	51,879	-	-	75,162	64,203
Crop Acres						
Total crop acres	2,051	888	1,804	2,186	3,475	1,837
Total crop acres owned	518	146	179	532	976	714
Total crop acres cash rented	1,490	742	1,583	1,615	2,457	1,039
Total crop acres share rented	43	-	42	39	42	85
Machinery value per crop acre	336	182	307	278	355	452

Financial Summary
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(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	134	83	18	17	14
Income Statement					
Gross cash farm income	813,806	1,027,159	163,585	449,932	555,516
Total cash farm expense	660,796	820,993	141,376	368,015	416,220
Net cash farm income	153,009	206,166	22,209	81,917	139,297
Inventory change	35,921	34,428	20,959	12,764	50,012
Depreciation	-69,468	-92,738	-11,441	-29,876	-50,623
Net farm income from operations	119,463	147,856	31,726	64,805	138,686
Gain or loss on capital sales	-2,749	-3,780	-2	-4,113	1,095
Average net farm income	116,714	144,076	31,725	60,692	139,780
Median net farm income	75,045	97,689	29,038	81,758	47,787
Profitability (cost)					
Rate of return on assets	3.9 %	3.8 %	4.5 %	3.3 %	6.2 %
Rate of return on equity	3.9 %	3.8 %	5.6 %	2.7 %	8.4 %
Operating profit margin	13.0 %	12.0 %	18.9 %	13.2 %	29.0 %
Asset turnover rate	30.3 %	31.6 %	23.8 %	25.0 %	21.4 %
Liquidity & Repayment (end of year)					
Current assets	583,658	785,977	147,548	438,893	284,666
Current liabilities	358,572	461,343	103,571	325,565	204,270
Current ratio	1.63	1.70	1.42	1.35	1.39
Working capital	225,086	324,634	43,977	113,329	80,397
Change in working capital	25,555	25,122	14,946	10,468	65,031
Working capital to gross inc	33.9 %	37.1 %	23.4 %	23.4 %	19.0 %
Term debt coverage ratio	1.80	1.88	2.13	1.40	1.71
Replacement coverage ratio	1.27	1.28	2.01	1.12	1.32
Term debt to EBITDA	2.59	2.07	3.37	3.09	4.25
Solvency (end of year at cost)					
Number of sole proprietors	122	73	18	17	13
Total assets	2,436,637	3,004,940	747,864	1,939,247	2,404,574
Total liabilities	965,591	1,122,251	370,721	759,698	1,245,038
Net worth	1,471,045	1,882,689	377,143	1,179,549	1,159,537
Net worth change	73,818	85,825	55,070	40,172	82,361
Farm debt to asset ratio	42 %	40 %	55 %	43 %	56 %
Total debt to asset ratio	40 %	37 %	50 %	39 %	52 %
Change in earned net worth %	5 %	5 %	17 %	4 %	8 %
Nonfarm Information					
Net nonfarm income	42,112	39,295	55,724	26,511	64,400
Farms reporting living expenses	35	25	2	5	3
Total family living expense	67,357	72,367	-	50,049	-
Crop Acres					
Total crop acres	2,051	2,812	219	1,003	930
Total crop acres owned	518	639	75	396	492
Total crop acres cash rented	1,490	2,123	116	559	419
Total crop acres share rented	43	50	28	47	19
Machinery value per crop acre	336	327	371	312	505

EXPLANATORY NOTES FOR CROPS TABLES

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

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

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

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

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

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

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(Farms Sorted By Net Return)

Barley on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	5
Acres	232.20
Yield per acre (bu.)	56.38
Operators share of yield %	100.00
Value per bu.	4.11
Total product return per acre	231.76
Crop insurance per acre	61.65
Other crop income per acre	2.54
Gross return per acre	295.95
Direct Expenses	
Seed and plants	16.60
Fertilizer	55.48
Crop chemicals	23.57
Crop insurance	9.37
Fuel & oil	8.35
Repairs	11.33
Custom hire	0.66
Operating interest	0.91
Miscellaneous	0.92
Total direct expenses per acre	127.19
Return over direct exp per acre	168.75
Overhead Expenses	
Hired labor	6.49
Machinery leases	0.65
RE & pers. property taxes	5.58
Farm insurance	3.16
Utilities	3.22
Dues & professional fees	1.21
Interest	5.47
Mach & bldg depreciation	28.16
Miscellaneous	3.60
Total overhead expenses per acre	57.56
Total dir & ovhd expenses per acre	184.75
Net return per acre	111.20
Government payments	21.33
Net return with govt pmts	132.53
Labor & management charge	21.20
Net return over lbr & mgt	111.33
Cost of Production	
Total direct expense per bu.	2.26
Total dir & ovhd exp per bu.	3.28
Less govt & other income	1.76
With labor & management	2.14
Net value per unit	4.11
Machinery cost per acre	45.99
Est. labor hours per acre	0.95

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(Farms Sorted By Net Return)

Barley on Cash Rent

	<u>Avg. Of All Farms</u>
Number of farms	11
Acres	497.95
Yield per acre (bu.)	79.33
Operators share of yield %	100.00
Value per bu.	4.52
Total product return per acre	358.37
Crop insurance per acre	28.17
Other crop income per acre	0.74
Gross return per acre	387.28
Direct Expenses	
Seed and plants	12.70
Fertilizer	58.02
Crop chemicals	31.55
Crop insurance	9.23
Fuel & oil	10.07
Repairs	19.40
Custom hire	2.63
Land rent	69.41
Operating interest	3.11
Miscellaneous	1.73
Total direct expenses per acre	217.83
Return over direct exp per acre	169.45
Overhead Expenses	
Custom hire	1.21
Hired labor	12.64
Machinery leases	4.14
Building leases	0.18
Farm insurance	5.57
Utilities	4.46
Dues & professional fees	2.40
Interest	1.43
Mach & bldg depreciation	33.75
Miscellaneous	5.96
Total overhead expenses per acre	71.73
Total dir & ovhd expenses per acre	289.56
Net return per acre	97.72
Government payments	12.19
Net return with govt pmts	109.91
Labor & management charge	20.71
Net return over lbr & mgt	89.20
Cost of Production	
Total direct expense per bu.	2.75
Total dir & ovhd exp per bu.	3.65
Less govt & other income	3.13
With labor & management	3.39
Net value per unit	4.52
Machinery cost per acre	67.75
Est. labor hours per acre	0.97

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(Farms Sorted By Net Return)

Beans, Pinto on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	8
Acres	293.63
Yield per acre (cwt.)	17.35
Operators share of yield %	100.00
Value per cwt.	21.97
Total product return per acre	381.11
Other crop income per acre	2.11
Gross return per acre	383.22
Direct Expenses	
Seed and plants	54.79
Fertilizer	14.52
Crop chemicals	51.28
Crop insurance	14.41
Fuel & oil	15.12
Repairs	32.51
Custom hire	3.64
Operating interest	8.10
Miscellaneous	1.85
Total direct expenses per acre	196.23
Return over direct exp per acre	186.99
Overhead Expenses	
Custom hire	0.73
Hired labor	6.79
Machinery leases	3.41
RE & pers. property taxes	7.19
Farm insurance	5.09
Utilities	5.22
Dues & professional fees	0.34
Interest	48.32
Mach & bldg depreciation	40.17
Miscellaneous	5.53
Total overhead expenses per acre	122.79
Total dir & ovhd expenses per acre	319.01
Net return per acre	64.20
Government payments	10.39
Net return with govt pmts	74.59
Labor & management charge	25.16
Net return over lbr & mgt	49.43
Cost of Production	
Total direct expense per cwt.	11.31
Total dir & ovhd exp per cwt.	18.39
Less govt & other income	17.67
With labor & management	19.12
Net value per unit	21.97
Machinery cost per acre	97.56
Est. labor hours per acre	1.00

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(Farms Sorted By Net Return)

Beans, Pinto on Cash Rent

	<u>Avg. Of All Farms</u>
Number of farms	17
Acres	482.33
Yield per acre (cwt.)	16.80
Operators share of yield %	100.00
Value per cwt.	22.82
Total product return per acre	383.28
Crop insurance per acre	34.01
Other crop income per acre	1.79
Gross return per acre	419.08
Direct Expenses	
Seed and plants	48.37
Fertilizer	31.47
Crop chemicals	49.13
Crop insurance	14.98
Fuel & oil	11.91
Repairs	24.95
Custom hire	0.69
Land rent	64.37
Machinery leases	3.41
Operating interest	8.42
Miscellaneous	1.03
Total direct expenses per acre	258.73
Return over direct exp per acre	160.35
Overhead Expenses	
Custom hire	1.46
Hired labor	15.60
Machinery leases	6.69
Farm insurance	4.48
Utilities	4.64
Dues & professional fees	0.98
Interest	2.75
Mach & bldg depreciation	31.58
Miscellaneous	5.55
Total overhead expenses per acre	73.72
Total dir & ovhd expenses per acre	332.45
Net return per acre	86.63
Government payments	10.36
Net return with govt pmts	96.99
Labor & management charge	24.75
Net return over lbr & mgt	72.23
Cost of Production	
Total direct expense per cwt.	15.40
Total dir & ovhd exp per cwt.	19.79
Less govt & other income	17.04
With labor & management	18.52
Net value per unit	22.82
Machinery cost per acre	79.76
Est. labor hours per acre	1.19

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(Farms Sorted By Net Return)

Canola on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	5
Acres	303.11
Yield per acre (cwt.)	14.94
Operators share of yield %	100.00
Value per cwt.	17.60
Total product return per acre	262.88
Crop insurance per acre	37.54
Other crop income per acre	1.77
Gross return per acre	302.18
Direct Expenses	
Seed and plants	56.93
Fertilizer	72.34
Crop chemicals	29.79
Crop insurance	11.95
Fuel & oil	9.99
Repairs	14.36
Custom hire	3.76
Operating interest	1.77
Miscellaneous	0.17
Total direct expenses per acre	201.05
Return over direct exp per acre	101.13
Overhead Expenses	
Custom hire	3.94
Hired labor	7.83
RE & pers. property taxes	4.93
Farm insurance	3.10
Utilities	2.83
Dues & professional fees	0.98
Interest	10.14
Mach & bldg depreciation	28.94
Miscellaneous	5.72
Total overhead expenses per acre	68.43
Total dir & ovhd expenses per acre	269.49
Net return per acre	32.70
Government payments	17.60
Net return with govt pmts	50.29
Labor & management charge	20.71
Net return over lbr & mgt	29.59
Cost of Production	
Total direct expense per cwt.	13.46
Total dir & ovhd exp per cwt.	18.04
Less govt & other income	14.23
With labor & management	15.62
Net value per unit	17.60
Machinery cost per acre	58.42
Est. labor hours per acre	0.91

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(Farms Sorted By Net Return)

Canola on Cash Rent

	<u>Avg. Of All Farms</u>
Number of farms	9
Acres	461.67
Yield per acre (cwt.)	14.41
Operators share of yield %	100.00
Value per cwt.	16.94
Total product return per acre	244.14
Crop insurance per acre	27.31
Other crop income per acre	0.57
Gross return per acre	272.02
Direct Expenses	
Seed and plants	58.40
Fertilizer	70.87
Crop chemicals	26.67
Crop insurance	8.63
Fuel & oil	9.63
Repairs	15.12
Custom hire	2.97
Land rent	52.53
Operating interest	2.88
Miscellaneous	0.18
Total direct expenses per acre	247.89
Return over direct exp per acre	24.13
Overhead Expenses	
Custom hire	1.46
Hired labor	7.71
Machinery leases	1.39
Farm insurance	3.89
Utilities	2.63
Dues & professional fees	0.91
Interest	3.03
Mach & bldg depreciation	25.11
Miscellaneous	4.62
Total overhead expenses per acre	50.75
Total dir & ovhd expenses per acre	298.64
Net return per acre	-26.62
Government payments	16.06
Net return with govt pmts	-10.56
Labor & management charge	19.73
Net return over lbr & mgt	-30.29
Cost of Production	
Total direct expense per cwt.	17.20
Total dir & ovhd exp per cwt.	20.72
Less govt & other income	17.67
With labor & management	19.04
Net value per unit	16.94
Machinery cost per acre	55.09
Est. labor hours per acre	0.95

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(Farms Sorted By Net Return)

Corn on Owned Land

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	40	8	8	8
Acres	329.53	245.93	366.25	494.58
Yield per acre (bu.)	145.97	132.40	134.93	172.41
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	2.95	2.78	2.99	3.01
Total product return per acre	431.03	368.69	403.75	518.54
Crop insurance per acre	4.33	-	10.06	1.67
Other crop income per acre	1.02	0.19	1.05	-
Gross return per acre	436.38	368.88	414.86	520.21
Direct Expenses				
Seed and plants	86.35	86.60	72.23	91.36
Fertilizer	90.75	95.29	84.72	96.65
Crop chemicals	27.52	35.11	26.77	23.74
Crop insurance	17.26	20.71	19.28	14.84
Drying expense	6.87	9.62	2.58	5.89
Fuel & oil	16.15	17.15	18.86	15.72
Repairs	36.86	48.60	32.54	38.00
Custom hire	4.69	1.92	5.88	4.77
Machinery leases	1.44	8.15	0.76	-
Operating interest	7.68	10.94	3.98	5.31
Miscellaneous	1.69	8.25	-	1.09
Total direct expenses per acre	297.26	342.34	267.60	297.38
Return over direct exp per acre	139.12	26.54	147.26	222.83
Overhead Expenses				
Custom hire	0.57	-	1.09	0.40
Hired labor	14.46	3.20	26.55	14.32
Machinery leases	2.99	0.39	6.02	2.01
RE & pers. property taxes	8.44	9.55	8.58	8.38
Farm insurance	4.92	6.86	4.65	3.90
Utilities	5.12	6.28	6.99	3.33
Dues & professional fees	0.78	0.20	1.17	0.66
Interest	39.44	51.03	46.48	30.00
Mach & bldg depreciation	38.85	41.19	33.45	44.47
Miscellaneous	4.35	3.06	3.61	3.04
Total overhead expenses per acre	119.92	121.76	138.60	110.52
Total dir & ovhd expenses per acre	417.18	464.10	406.20	407.90
Net return per acre	19.20	-95.22	8.66	112.31
Government payments	10.69	15.85	12.84	8.37
Net return with govt pmts	29.89	-79.38	21.50	120.69
Labor & management charge	30.35	31.10	28.34	30.86
Net return over lbr & mgt	-0.45	-110.48	-6.85	89.83
Cost of Production				
Total direct expense per bu.	2.04	2.59	1.98	1.72
Total dir & ovhd exp per bu.	2.86	3.51	3.01	2.37
Less govt & other income	2.75	3.38	2.83	2.31
With labor & management	2.96	3.62	3.04	2.49
Net value per unit	2.95	2.78	2.99	3.01
Machinery cost per acre	104.43	126.44	102.35	106.51
Est. labor hours per acre	1.58	1.37	1.81	1.45

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(Farms Sorted By Net Return)

Corn on Cash Rent

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	57	11	12	12
Acres	533.70	408.60	599.02	475.22
Yield per acre (bu.)	143.46	109.01	147.54	157.64
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	2.98	2.94	3.09	3.10
Total product return per acre	426.99	320.11	456.35	489.40
Hedging gains/losses per acre	0.66	-	-	-
Crop insurance per acre	5.59	-	10.68	0.85
Other crop income per acre	1.06	3.44	-	-
Gross return per acre	434.30	323.55	467.04	490.25
Direct Expenses				
Seed and plants	88.07	84.72	94.12	82.67
Fertilizer	91.60	84.85	94.66	85.11
Crop chemicals	23.84	26.64	21.96	23.46
Crop insurance	16.67	13.59	17.57	15.93
Drying expense	6.01	7.14	11.17	3.14
Fuel & oil	15.62	11.58	14.34	16.26
Repairs	28.57	34.31	26.20	21.98
Custom hire	3.14	6.53	3.79	2.46
Land rent	81.20	88.96	80.75	72.40
Machinery leases	0.44	1.88	-	0.42
Operating interest	7.51	6.81	8.97	6.43
Miscellaneous	1.09	1.70	0.67	3.21
Total direct expenses per acre	363.77	368.70	374.21	333.47
Return over direct exp per acre	70.53	-45.14	92.83	156.78
Overhead Expenses				
Custom hire	1.11	0.98	0.09	4.45
Hired labor	15.05	15.99	13.94	8.63
Machinery leases	6.81	5.30	8.11	12.69
Building leases	0.25	0.04	0.61	0.15
Farm insurance	4.91	4.30	5.63	4.05
Utilities	4.71	6.22	4.52	4.19
Dues & professional fees	1.85	1.30	0.83	1.19
Interest	4.11	3.04	6.02	3.12
Mach & bldg depreciation	42.76	37.67	54.31	31.15
Miscellaneous	5.66	5.43	7.95	4.27
Total overhead expenses per acre	87.22	80.25	101.99	73.88
Total dir & ovhd expenses per acre	450.99	448.95	476.20	407.34
Net return per acre	-16.69	-125.40	-9.16	82.91
Government payments	9.03	12.03	8.27	7.54
Net return with govt pmts	-7.66	-113.37	-0.90	90.45
Labor & management charge	31.26	26.95	36.33	29.93
Net return over lbr & mgt	-38.92	-140.31	-37.23	60.52
Cost of Production				
Total direct expense per bu.	2.54	3.38	2.54	2.12
Total dir & ovhd exp per bu.	3.14	4.12	3.23	2.58
Less govt & other income	3.03	3.98	3.10	2.53
With labor & management	3.25	4.22	3.35	2.72
Net value per unit	2.98	2.94	3.09	3.10
Machinery cost per acre	98.44	98.12	105.43	90.19
Est. labor hours per acre	1.50	1.45	1.42	1.39

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(Farms Sorted By Net Return)

Corn Silage on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	8
Acres	58.50
Yield per acre (ton)	17.37
Operators share of yield %	100.00
Value per ton	29.87
Total product return per acre	518.87
Crop insurance per acre	2.45
Gross return per acre	521.32
Direct Expenses	
Seed and plants	88.51
Fertilizer	67.56
Crop chemicals	26.57
Crop insurance	14.43
Fuel & oil	19.01
Repairs	30.69
Custom hire	27.03
Machinery leases	1.05
Operating interest	10.23
Total direct expenses per acre	285.09
Return over direct exp per acre	236.23
Overhead Expenses	
Custom hire	0.73
Hired labor	15.29
Machinery leases	1.36
RE & pers. property taxes	6.93
Farm insurance	5.29
Utilities	4.56
Dues & professional fees	0.91
Interest	24.41
Mach & bldg depreciation	43.53
Miscellaneous	6.31
Total overhead expenses per acre	109.33
Total dir & ovhd expenses per acre	394.42
Net return per acre	126.90
Government payments	21.56
Net return with govt pmts	148.47
Labor & management charge	29.77
Net return over lbr & mgt	118.70
Cost of Production	
Total direct expense per ton	16.41
Total dir & ovhd exp per ton	22.71
Less govt & other income	21.32
With labor & management	23.04
Net value per unit	29.87
Machinery cost per acre	125.19
Est. labor hours per acre	2.39

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(Farms Sorted By Net Return)

Corn Silage on Cash Rent

	<u>Avg. Of All Farms</u>
Number of farms	7
Acres	162.81
Yield per acre (ton)	17.21
Operators share of yield %	100.00
Value per ton	28.04
Total product return per acre	482.58
Gross return per acre	482.58
Direct Expenses	
Seed and plants	77.37
Fertilizer	77.60
Crop chemicals	27.59
Crop insurance	18.07
Fuel & oil	18.09
Repairs	37.66
Custom hire	32.77
Land rent	69.93
Machinery leases	0.17
Operating interest	4.96
Miscellaneous	0.12
Total direct expenses per acre	364.33
Return over direct exp per acre	118.26
Overhead Expenses	
Hired labor	26.06
Machinery leases	6.59
Farm insurance	3.46
Utilities	6.49
Dues & professional fees	1.62
Interest	7.13
Mach & bldg depreciation	26.13
Miscellaneous	5.32
Total overhead expenses per acre	82.81
Total dir & ovhd expenses per acre	447.14
Net return per acre	35.44
Government payments	3.56
Net return with govt pmts	39.01
Labor & management charge	26.00
Net return over lbr & mgt	13.01
Cost of Production	
Total direct expense per ton	21.17
Total dir & ovhd exp per ton	25.98
Less govt & other income	25.78
With labor & management	27.29
Net value per unit	28.04
Machinery cost per acre	126.48
Est. labor hours per acre	1.74

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(Farms Sorted By Net Return)

CRP on Owned Land

	<u>Avg. Of</u> <u>All Farms</u>
Number of farms	11
Acres	195.71
Yield per acre (\$)	52.59
Operators share of yield %	100.00
Value per \$	1.00
Total product return per acre	52.59
Gross return per acre	52.59
Direct Expenses	
Fuel & oil	0.52
Repairs	1.14
Miscellaneous	0.53
Total direct expenses per acre	2.19
Return over direct exp per acre	50.39
Overhead Expenses	
RE & pers. property taxes	6.31
Farm insurance	0.55
Interest	15.56
Mach & bldg depreciation	1.55
Miscellaneous	0.65
Total overhead expenses per acre	24.62
Total dir & ovhd expenses per acre	26.82
Net return per acre	25.77

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(Farms Sorted By Net Return)

Hay, Alfalfa on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	8
Acres	106.14
Yield per acre (ton)	2.37
Operators share of yield %	100.00
Value per ton	74.30
Total product return per acre	175.93
Crop insurance per acre	10.66
Gross return per acre	186.59
Direct Expenses	
Fertilizer	12.36
Crop insurance	1.40
Fuel & oil	10.53
Repairs	13.39
Custom hire	5.18
Operating interest	5.65
Total direct expenses per acre	48.50
Return over direct exp per acre	138.08
Overhead Expenses	
Custom hire	0.75
Hired labor	4.16
Machinery leases	0.72
Building leases	0.05
RE & pers. property taxes	8.56
Farm insurance	5.28
Utilities	4.18
Dues & professional fees	0.42
Interest	27.50
Mach & bldg depreciation	31.56
Miscellaneous	3.50
Total overhead expenses per acre	86.67
Total dir & ovhd expenses per acre	135.17
Net return per acre	51.41
Government payments	5.06
Net return with govt pmts	56.48
Labor & management charge	21.50
Net return over lbr & mgt	34.98
Cost of Production	
Total direct expense per ton	20.48
Total dir & ovhd exp per ton	57.09
Less govt & other income	50.45
With labor & management	59.53
Net value per unit	74.30
Machinery cost per acre	62.90
Est. labor hours per acre	1.21

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(Farms Sorted By Net Return)

Hay, Alfalfa on Cash Rent

	<u>Avg. Of All Farms</u>
Number of farms	8
Acres	155.25
Yield per acre (ton)	2.97
Operators share of yield %	100.00
Value per ton	77.53
Total product return per acre	230.06
Gross return per acre	230.06
Direct Expenses	
Fertilizer	6.69
Fuel & oil	11.76
Repairs	23.16
Custom hire	6.50
Land rent	70.38
Operating interest	4.62
Miscellaneous	0.15
Total direct expenses per acre	123.26
Return over direct exp per acre	106.80
Overhead Expenses	
Hired labor	16.83
Machinery leases	4.63
Farm insurance	3.92
Utilities	4.70
Dues & professional fees	1.22
Interest	5.24
Mach & bldg depreciation	17.66
Miscellaneous	4.16
Total overhead expenses per acre	58.35
Total dir & ovhd expenses per acre	181.61
Net return per acre	48.45
Government payments	0.39
Net return with govt pmts	48.84
Labor & management charge	17.13
Net return over lbr & mgt	31.70
Cost of Production	
Total direct expense per ton	41.54
Total dir & ovhd exp per ton	61.20
Less govt & other income	61.07
With labor & management	66.85
Net value per unit	77.53
Machinery cost per acre	67.10
Est. labor hours per acre	1.19

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(Farms Sorted By Net Return)

Hay, Grass on Cash Rent

	Avg. Of All Farms
Number of farms	9
Acres	219.67
Yield per acre (ton)	1.20
Operators share of yield %	100.00
Value per ton	49.63
Total product return per acre	59.71
Gross return per acre	59.71
Direct Expenses	
Fuel & oil	7.24
Repairs	10.49
Land rent	18.92
Operating interest	2.98
Miscellaneous	1.23
Total direct expenses per acre	40.86
Return over direct exp per acre	18.85
Overhead Expenses	
Hired labor	4.25
Machinery leases	0.97
Farm insurance	2.29
Utilities	1.30
Dues & professional fees	0.76
Interest	2.22
Mach & bldg depreciation	22.01
Miscellaneous	2.46
Total overhead expenses per acre	36.26
Total dir & ovhd expenses per acre	77.12
Net return per acre	-17.41
Government payments	-
Net return with govt pmts	-17.41
Labor & management charge	13.26
Net return over lbr & mgt	-30.68
Cost of Production	
Total direct expense per ton	33.96
Total dir & ovhd exp per ton	64.10
Less govt & other income	64.10
With labor & management	75.12
Net value per unit	49.63
Machinery cost per acre	40.60
Est. labor hours per acre	0.77

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(Farms Sorted By Net Return)

Hay, Mixed Alfalfa/Grass on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	7
Acres	177.00
Yield per acre (ton)	0.95
Operators share of yield %	100.00
Value per ton	58.39
Total product return per acre	55.23
Crop insurance per acre	2.67
Gross return per acre	57.90
Direct Expenses	
Fertilizer	4.24
Crop insurance	0.49
Fuel & oil	6.81
Repairs	12.98
Custom hire	2.01
Operating interest	1.53
Miscellaneous	0.26
Total direct expenses per acre	28.32
Return over direct exp per acre	29.58
Overhead Expenses	
Custom hire	1.51
Hired labor	5.21
Machinery leases	0.40
RE & pers. property taxes	5.02
Farm insurance	3.67
Utilities	3.37
Dues & professional fees	0.83
Interest	12.58
Mach & bldg depreciation	18.70
Miscellaneous	1.22
Total overhead expenses per acre	52.50
Total dir & ovhd expenses per acre	80.82
Net return per acre	-22.92
Government payments	5.63
Net return with govt pmts	-17.29
Labor & management charge	19.08
Net return over lbr & mgt	-36.37
Cost of Production	
Total direct expense per ton	29.94
Total dir & ovhd exp per ton	85.46
Less govt & other income	76.68
With labor & management	96.86
Net value per unit	58.39
Machinery cost per acre	40.78
Est. labor hours per acre	1.09

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(Farms Sorted By Net Return)

Hay, Mixed Alfalfa/Grass on Cash Rent

	<u>Avg. Of All Farms</u>
Number of farms	6
Acres	100.25
Yield per acre (ton)	0.77
Operators share of yield %	100.00
Value per ton	63.06
Total product return per acre	48.48
Gross return per acre	48.48
Direct Expenses	
Seed and plants	0.60
Fuel & oil	8.81
Repairs	17.84
Custom hire	0.32
Land rent	21.28
Operating interest	2.56
Total direct expenses per acre	51.41
Return over direct exp per acre	-2.93
Overhead Expenses	
Custom hire	0.07
Hired labor	4.01
Machinery leases	0.58
Farm insurance	4.15
Utilities	3.07
Dues & professional fees	0.06
Interest	1.61
Mach & bldg depreciation	16.16
Miscellaneous	3.62
Total overhead expenses per acre	33.33
Total dir & ovhd expenses per acre	84.74
Net return per acre	-36.26
Government payments	2.23
Net return with govt pmts	-34.03
Labor & management charge	17.44
Net return over lbr & mgt	-51.48
Cost of Production	
Total direct expense per ton	66.87
Total dir & ovhd exp per ton	110.23
Less govt & other income	107.33
With labor & management	130.02
Net value per unit	63.06
Machinery cost per acre	43.15
Est. labor hours per acre	1.03

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(Farms Sorted By Net Return)

Hay, Small Grain on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	8
Acres	89.68
Yield per acre (ton)	1.80
Operators share of yield %	100.00
Value per ton	62.82
Total product return per acre	112.98
Crop insurance per acre	10.13
Gross return per acre	123.11
Direct Expenses	
Seed and plants	19.51
Fertilizer	29.32
Crop chemicals	13.32
Crop insurance	1.25
Fuel & oil	9.49
Repairs	15.35
Custom hire	6.61
Operating interest	1.64
Miscellaneous	0.92
Total direct expenses per acre	97.40
Return over direct exp per acre	25.72
Overhead Expenses	
Custom hire	1.86
Hired labor	9.27
Building leases	0.28
RE & pers. property taxes	5.80
Farm insurance	2.83
Utilities	3.21
Dues & professional fees	0.92
Interest	11.07
Mach & bldg depreciation	26.88
Miscellaneous	6.78
Total overhead expenses per acre	68.91
Total dir & ovhd expenses per acre	166.30
Net return per acre	-43.19
Government payments	20.18
Net return with govt pmts	-23.01
Labor & management charge	22.16
Net return over lbr & mgt	-45.17
Cost of Production	
Total direct expense per ton	54.15
Total dir & ovhd exp per ton	92.47
Less govt & other income	75.61
With labor & management	87.93
Net value per unit	62.82
Machinery cost per acre	58.06
Est. labor hours per acre	1.18

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(Farms Sorted By Net Return)

Hay, Small Grain on Cash Rent

	<u>Avg. Of All Farms</u>
Number of farms	6
Acres	69.33
Yield per acre (ton)	3.19
Operators share of yield %	100.00
Value per ton	59.85
Total product return per acre	190.64
Gross return per acre	190.64
Direct Expenses	
Seed and plants	35.85
Fertilizer	11.37
Crop chemicals	15.00
Fuel & oil	8.97
Repairs	16.71
Custom hire	8.09
Land rent	51.78
Operating interest	2.78
Miscellaneous	2.14
Total direct expenses per acre	152.70
Return over direct exp per acre	37.94
Overhead Expenses	
Custom hire	0.68
Hired labor	6.45
Machinery leases	1.52
Building leases	0.20
Farm insurance	4.34
Utilities	3.00
Dues & professional fees	2.02
Interest	2.19
Mach & bldg depreciation	28.08
Miscellaneous	8.42
Total overhead expenses per acre	56.90
Total dir & ovhd expenses per acre	209.60
Net return per acre	-18.96
Government payments	25.91
Net return with govt pmts	6.94
Labor & management charge	24.38
Net return over lbr & mgt	-17.44
Cost of Production	
Total direct expense per ton	47.94
Total dir & ovhd exp per ton	65.80
Less govt & other income	57.67
With labor & management	65.32
Net value per unit	59.85
Machinery cost per acre	63.19
Est. labor hours per acre	1.23

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(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	419.01	349.70	404.34
Yield per acre (aum)	0.99	0.74	1.48
Operators share of yield %	100.00	100.00	100.00
Value per aum	24.36	23.61	26.01
Total product return per acre	24.22	17.54	38.58
Gross return per acre	24.22	17.54	38.58
Direct Expenses			
Fuel & oil	0.52	0.34	0.42
Repairs	1.02	0.76	0.91
Operating interest	0.25	0.19	0.19
Miscellaneous	0.05	0.30	-
Total direct expenses per acre	1.84	1.59	1.53
Return over direct exp per acre	22.37	15.95	37.04
Overhead Expenses			
RE & pers. property taxes	2.78	2.54	3.67
Farm insurance	0.81	0.20	0.20
Utilities	0.23	0.12	0.12
Interest	6.12	4.43	2.73
Mach & bldg depreciation	1.15	0.89	1.31
Miscellaneous	0.89	0.47	0.56
Total overhead expenses per acre	11.98	8.64	8.59
Total dir & ovhd expenses per acre	13.83	10.24	10.12
Net return per acre	10.39	7.30	28.46

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(Farms Sorted By Net Return)

Pasture on Cash Rent

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	30	6	6	6
Acres	1,074.96	697.50	1,195.42	1,263.83
Yield per acre (aum)	0.99	0.93	0.75	1.30
Operators share of yield %	100.00	100.00	100.00	100.00
Value per aum	23.19	19.62	24.90	24.57
Total product return per acre	23.03	18.29	18.77	31.93
Gross return per acre	23.03	18.29	18.77	31.93
Direct Expenses				
Fuel & oil	0.64	1.06	0.30	0.40
Repairs	1.01	2.41	0.50	0.52
Land rent	18.52	26.32	18.18	14.45
Miscellaneous	0.35	0.48	0.15	0.14
Total direct expenses per acre	20.53	30.27	19.13	15.50
Return over direct exp per acre	2.50	-11.98	-0.36	16.43
Overhead Expenses				
Hired labor	0.46	1.78	0.09	0.30
Farm insurance	0.74	3.73	0.09	0.18
Dues & professional fees	0.21	1.15	-	0.09
Mach & bldg depreciation	1.42	1.32	1.38	1.40
Miscellaneous	0.73	1.14	0.60	0.46
Total overhead expenses per acre	3.56	9.11	2.17	2.43
Total dir & ovhd expenses per acre	24.09	39.38	21.29	17.94
Net return per acre	-1.06	-21.09	-2.53	14.00

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(Farms Sorted By Net Return)

Peas, Field on Cash Rent

	<u>Avg. Of All Farms</u>
Number of farms	6
Acres	328.17
Yield per acre (bu.)	38.16
Operators share of yield %	100.00
Value per bu.	7.26
Total product return per acre	276.95
Crop insurance per acre	28.70
Other crop income per acre	1.26
Gross return per acre	306.91
Direct Expenses	
Seed and plants	57.91
Fertilizer	5.45
Crop chemicals	38.94
Crop insurance	10.71
Fuel & oil	9.34
Repairs	24.28
Custom hire	0.82
Land rent	78.75
Machinery leases	1.88
Operating interest	6.71
Total direct expenses per acre	234.80
Return over direct exp per acre	72.11
Overhead Expenses	
Custom hire	3.22
Hired labor	11.25
Machinery leases	14.37
Building leases	0.45
Farm insurance	4.81
Utilities	4.55
Dues & professional fees	0.91
Interest	3.15
Mach & bldg depreciation	19.41
Miscellaneous	7.29
Total overhead expenses per acre	69.41
Total dir & ovhd expenses per acre	304.20
Net return per acre	2.71
Government payments	15.32
Net return with govt pmts	18.02
Labor & management charge	22.27
Net return over lbr & mgt	-4.25
Cost of Production	
Total direct expense per bu.	6.15
Total dir & ovhd exp per bu.	7.97
Less govt & other income	6.78
With labor & management	7.37
Net value per unit	7.26
Machinery cost per acre	74.53
Est. labor hours per acre	1.04

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

Prevented planting on Cash Rent

	<u>Avg. Of All Farms</u>
Number of farms	10
Acres	153.20
Yield per acre	-
Operators share of yield %	-
Value per \$	-
Total product return per acre	-
Crop insurance per acre	158.45
Gross return per acre	158.45
Direct Expenses	
Crop chemicals	2.89
Crop insurance	11.86
Fuel & oil	3.60
Repairs	6.93
Land rent	82.91
Operating interest	2.19
Total direct expenses per acre	110.38
Return over direct exp per acre	48.07
Overhead Expenses	
Hired labor	5.33
Machinery leases	3.32
Farm insurance	4.89
Utilities	3.37
Dues & professional fees	2.59
Interest	3.82
Mach & bldg depreciation	12.62
Miscellaneous	6.57
Total overhead expenses per acre	42.52
Total dir & ovhd expenses per acre	152.90
Net return per acre	5.55
Government payments	8.46
Net return with govt pmts	14.01
Labor & management charge	9.81
Net return over lbr & mgt	4.20

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

Soybeans on Owned Land

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	49	9	10	10
Acres	404.13	355.30	339.73	446.46
Yield per acre (bu.)	37.08	31.84	37.70	39.52
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	8.90	8.78	8.86	9.03
Total product return per acre	329.95	279.47	334.00	356.81
Hedging gains/losses per acre	0.14	-	-	-
Crop insurance per acre	19.08	-	0.01	82.10
Other crop income per acre	0.41	0.72	0.97	-
Gross return per acre	349.58	280.19	334.98	438.90
Direct Expenses				
Seed and plants	64.85	67.41	59.85	61.81
Fertilizer	9.81	12.99	6.69	6.22
Crop chemicals	31.17	32.28	36.59	25.23
Crop insurance	13.82	14.97	11.59	14.83
Fuel & oil	11.09	12.70	11.82	9.40
Repairs	23.40	24.76	27.87	15.75
Custom hire	5.56	8.63	7.45	4.12
Machinery leases	5.01	24.30	0.21	-
Operating interest	5.14	6.81	3.74	5.87
Miscellaneous	1.78	7.25	-	2.12
Total direct expenses per acre	171.61	212.11	165.81	145.36
Return over direct exp per acre	177.97	68.08	169.17	293.54
Overhead Expenses				
Custom hire	0.70	2.89	0.37	-
Hired labor	6.27	7.91	3.35	6.36
Machinery leases	0.94	0.19	0.69	0.67
RE & pers. property taxes	7.98	7.84	8.43	8.36
Farm insurance	5.04	5.95	5.84	4.71
Utilities	3.74	3.46	4.17	2.74
Dues & professional fees	0.90	0.54	1.10	1.43
Interest	27.30	41.39	21.20	18.17
Mach & bldg depreciation	29.86	18.21	36.71	38.20
Miscellaneous	4.72	3.00	6.82	5.61
Total overhead expenses per acre	87.45	91.38	88.67	86.25
Total dir & ovhd expenses per acre	259.07	303.49	254.48	231.61
Net return per acre	90.51	-23.30	80.50	207.29
Government payments	11.68	12.05	14.36	13.88
Net return with govt pmts	102.20	-11.25	94.86	221.17
Labor & management charge	22.11	19.80	20.91	25.39
Net return over lbr & mgt	80.09	-31.05	73.95	195.78
Cost of Production				
Total direct expense per bu.	4.63	6.66	4.40	3.68
Total dir & ovhd exp per bu.	6.99	9.53	6.75	5.86
Less govt & other income	6.14	9.13	6.34	3.43
With labor & management	6.74	9.75	6.90	4.07
Net value per unit	8.90	8.78	8.86	9.03
Machinery cost per acre	79.11	97.01	88.06	67.44
Est. labor hours per acre	1.05	1.18	0.98	0.97

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Soybeans 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	77	15	16	16
Acres	1,009.63	1,102.79	1,104.38	702.27
Yield per acre (bu.)	36.82	33.82	35.41	43.08
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	8.90	8.96	8.98	8.94
Total product return per acre	327.49	303.15	318.12	385.34
Hedging gains/losses per acre	0.02	-	0.07	-
Crop insurance per acre	5.23	1.27	5.53	2.51
Other crop income per acre	0.26	0.50	0.07	-
Gross return per acre	332.99	304.92	323.79	387.86
Direct Expenses				
Seed and plants	64.14	64.91	62.14	60.90
Fertilizer	10.09	6.24	11.72	10.34
Crop chemicals	29.31	33.96	27.19	25.91
Crop insurance	14.46	16.71	15.73	12.20
Fuel & oil	11.11	13.98	9.12	9.62
Repairs	21.20	25.30	17.09	15.42
Custom hire	2.66	3.31	2.14	5.84
Land rent	74.25	93.87	66.38	72.32
Machinery leases	1.72	6.20	0.47	0.36
Operating interest	5.26	6.50	6.58	3.10
Miscellaneous	0.37	0.11	1.37	0.05
Total direct expenses per acre	234.57	271.09	219.92	216.07
Return over direct exp per acre	98.42	33.83	103.87	171.79
Overhead Expenses				
Custom hire	0.58	1.12	-	0.06
Hired labor	10.52	15.36	7.78	9.23
Machinery leases	4.25	10.51	2.70	0.91
Building leases	0.23	0.05	0.72	0.15
Farm insurance	4.59	4.11	4.64	3.32
Utilities	3.87	4.86	3.90	1.95
Dues & professional fees	1.69	2.05	1.06	0.73
Interest	3.49	5.78	3.68	1.82
Mach & bldg depreciation	28.10	21.93	34.25	26.16
Miscellaneous	5.13	4.34	6.52	2.28
Total overhead expenses per acre	62.46	70.10	65.25	46.62
Total dir & ovhd expenses per acre	297.03	341.19	285.17	262.69
Net return per acre	35.96	-36.26	38.62	125.17
Government payments	11.42	12.53	15.21	7.50
Net return with govt pmts	47.38	-23.73	53.83	132.67
Labor & management charge	20.34	20.27	21.17	20.88
Net return over lbr & mgt	27.04	-44.00	32.66	111.78
Cost of Production				
Total direct expense per bu.	6.37	8.02	6.21	5.02
Total dir & ovhd exp per bu.	8.07	10.09	8.05	6.10
Less govt & other income	7.61	9.66	7.46	5.86
With labor & management	8.16	10.26	8.06	6.35
Net value per unit	8.90	8.96	8.99	8.94
Machinery cost per acre	70.40	86.92	64.59	58.43
Est. labor hours per acre	1.01	1.23	0.87	0.99

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Sunflowers on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	5
Acres	209.46
Yield per acre (cwt.)	14.79
Operators share of yield %	100.00
Value per cwt.	17.03
Total product return per acre	251.93
Crop insurance per acre	13.74
Gross return per acre	265.66
Direct Expenses	
Seed and plants	40.72
Fertilizer	27.51
Crop chemicals	37.89
Crop insurance	11.21
Fuel & oil	10.93
Repairs	19.09
Custom hire	1.56
Operating interest	7.79
Total direct expenses per acre	156.70
Return over direct exp per acre	108.96
Overhead Expenses	
Hired labor	8.84
Machinery leases	4.56
RE & pers. property taxes	4.85
Farm insurance	5.20
Utilities	2.25
Dues & professional fees	0.35
Interest	28.69
Mach & bldg depreciation	23.93
Miscellaneous	5.67
Total overhead expenses per acre	84.34
Total dir & ovhd expenses per acre	241.04
Net return per acre	24.62
Government payments	10.58
Net return with govt pmts	35.20
Labor & management charge	20.73
Net return over lbr & mgt	14.47
Cost of Production	
Total direct expense per cwt.	10.59
Total dir & ovhd exp per cwt.	16.30
Less govt & other income	14.65
With labor & management	16.05
Net value per unit	17.03
Machinery cost per acre	63.61
Est. labor hours per acre	1.10

Crop Enterprise Analysis
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Wheat, Durum on Cash Rent

	<u>Avg. Of All Farms</u>
Number of farms	6
Acres	782.92
Yield per acre (bu.)	49.66
Operators share of yield %	100.00
Value per bu.	7.18
Total product return per acre	356.29
Crop insurance per acre	13.76
Other crop income per acre	0.64
Gross return per acre	370.69
Direct Expenses	
Seed and plants	18.76
Fertilizer	49.17
Crop chemicals	33.60
Crop insurance	7.14
Drying expense	0.32
Fuel & oil	11.36
Repairs	19.43
Custom hire	0.44
Land rent	55.66
Operating interest	2.92
Total direct expenses per acre	198.80
Return over direct exp per acre	171.89
Overhead Expenses	
Custom hire	1.44
Hired labor	11.71
Machinery leases	2.66
Farm insurance	5.68
Utilities	3.25
Dues & professional fees	3.77
Interest	1.44
Mach & bldg depreciation	34.22
Miscellaneous	7.97
Total overhead expenses per acre	72.13
Total dir & ovhd expenses per acre	270.93
Net return per acre	99.76
Government payments	12.24
Net return with govt pmts	112.00
Labor & management charge	18.20
Net return over lbr & mgt	93.80
Cost of Production	
Total direct expense per bu.	4.00
Total dir & ovhd exp per bu.	5.46
Less govt & other income	4.92
With labor & management	5.29
Net value per unit	7.18
Machinery cost per acre	66.22
Est. labor hours per acre	1.00

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

Wheat, Spring on Owned Land

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	31	6	6	7
Acres	343.83	238.87	204.48	465.17
Yield per acre (bu.)	47.86	39.52	47.52	55.16
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	5.86	5.62	5.81	5.98
Total product return per acre	280.61	222.13	276.21	329.64
Hedging gains/losses per acre	0.25	-	2.20	-
Crop insurance per acre	9.79	25.47	0.61	7.79
Other crop income per acre	2.33	-	13.71	0.92
Gross return per acre	292.98	247.60	292.74	338.34
Direct Expenses				
Seed and plants	16.73	16.40	15.56	15.68
Fertilizer	62.53	77.92	62.16	55.20
Crop chemicals	26.65	38.90	30.73	19.83
Crop insurance	10.92	12.17	12.81	10.49
Drying expense	0.35	-	-	0.76
Fuel & oil	11.12	17.54	11.90	10.02
Repairs	19.84	37.34	26.05	16.55
Custom hire	7.52	8.37	5.55	10.39
Machinery leases	0.94	-	8.14	-
Operating interest	4.60	4.58	1.87	6.11
Miscellaneous	0.77	-	1.26	1.99
Total direct expenses per acre	161.97	213.22	176.03	147.03
Return over direct exp per acre	131.01	34.38	116.70	191.31
Overhead Expenses				
Custom hire	0.74	0.22	-	0.35
Hired labor	7.16	2.32	4.42	9.03
Machinery leases	0.72	1.08	0.17	0.72
Building leases	0.30	-	-	0.99
RE & pers. property taxes	7.31	9.87	7.44	7.71
Farm insurance	4.97	9.57	6.30	3.69
Utilities	3.71	5.50	5.50	3.75
Dues & professional fees	0.88	0.39	0.96	0.37
Interest	16.49	24.32	12.37	15.78
Mach & bldg depreciation	34.43	38.18	29.40	38.62
Miscellaneous	4.01	6.64	2.21	3.03
Total overhead expenses per acre	80.73	98.08	68.78	84.03
Total dir & ovhd expenses per acre	242.71	311.31	244.81	231.06
Net return per acre	50.27	-63.71	47.92	107.28
Government payments	17.67	13.49	32.94	15.41
Net return with govt pmts	67.94	-50.21	80.87	122.69
Labor & management charge	21.59	19.00	20.74	25.21
Net return over lbr & mgt	46.35	-69.22	60.13	97.47
Cost of Production				
Total direct expense per bu.	3.38	5.40	3.70	2.67
Total dir & ovhd exp per bu.	5.07	7.88	5.15	4.19
Less govt & other income	4.44	6.89	4.11	3.75
With labor & management	4.89	7.37	4.55	4.21
Net value per unit	5.87	5.62	5.86	5.98
Machinery cost per acre	74.81	103.30	79.89	74.20
Est. labor hours per acre	1.01	0.83	1.23	1.08

Crop Enterprise Analysis
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Wheat, Spring on Cash Rent

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	45	9	9	9
Acres	678.87	375.86	1,104.62	794.10
Yield per acre (bu.)	43.85	37.88	41.98	48.97
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	6.07	5.83	6.01	6.16
Total product return per acre	266.09	220.72	252.51	301.81
Hedging gains/losses per acre	0.06	-	-	-
Crop insurance per acre	18.60	3.35	28.14	18.46
Other crop income per acre	1.99	-	2.56	1.40
Gross return per acre	286.74	224.07	283.22	321.67
Direct Expenses				
Seed and plants	16.09	15.34	16.89	14.42
Fertilizer	51.71	59.87	53.91	44.87
Crop chemicals	24.65	26.44	21.76	24.05
Crop insurance	11.21	13.02	11.54	10.77
Fuel & oil	9.83	10.09	8.96	8.88
Repairs	19.34	24.71	18.34	18.80
Custom hire	3.47	6.43	2.52	3.03
Land rent	60.46	61.39	62.18	55.50
Machinery leases	2.01	15.88	-	0.06
Operating interest	5.55	5.26	7.74	3.13
Miscellaneous	0.82	0.13	1.57	0.23
Total direct expenses per acre	205.15	238.56	205.42	183.75
Return over direct exp per acre	81.59	-14.49	77.79	137.93
Overhead Expenses				
Custom hire	1.10	-	-	-
Hired labor	9.70	3.27	11.09	12.49
Machinery leases	3.01	0.38	2.79	3.84
Building leases	0.27	-	0.72	0.02
Farm insurance	3.82	4.80	3.88	3.15
Utilities	3.79	2.69	4.60	3.00
Dues & professional fees	0.73	1.02	0.75	0.55
Interest	2.39	3.40	1.74	1.87
Mach & bldg depreciation	27.04	21.10	30.25	23.74
Miscellaneous	4.31	3.11	3.85	3.33
Total overhead expenses per acre	56.15	39.77	59.67	51.97
Total dir & ovhd expenses per acre	261.29	278.33	265.09	235.72
Net return per acre	25.44	-54.26	18.13	85.95
Government payments	16.06	12.93	16.20	12.07
Net return with govt pmts	41.50	-41.33	34.32	98.02
Labor & management charge	19.65	17.42	19.88	19.25
Net return over lbr & mgt	21.85	-58.75	14.44	78.77
Cost of Production				
Total direct expense per bu.	4.68	6.30	4.89	3.75
Total dir & ovhd exp per bu.	5.96	7.35	6.31	4.81
Less govt & other income	5.12	6.92	5.20	4.16
With labor & management	5.57	7.38	5.67	4.55
Net value per unit	6.07	5.83	6.01	6.16
Machinery cost per acre	65.17	81.42	59.70	59.12
Est. labor hours per acre	0.93	0.91	0.87	1.01

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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Beef Cow-Calf -- Average Per Cwt. Produced

	<u>Avg. Of All Farms</u>	
Number of farms	18	
	Quantity	Value
Beef Calves sold (lb)	22.82	35.90
Transferred out (lb)	77.17	127.16
Cull sales		29.22
Other income		2.23
Purchased		-22.50
Transferred in		-32.17
Inventory change		-1.91
Gross margin		145.24
Direct Expenses		
Protein Vit Minerals (lb.)	25.35	4.01
Creep / Starter (lb.)	16.77	1.94
Complete Ration (lb.)	34.20	1.50
Corn Silage (lb.)	272.86	3.83
Hay, Alfalfa (lb.)	104.11	3.80
Hay, Grass (lb.)	824.15	21.56
Pasture (aum)	1.32	25.65
Stover (lb.)	62.24	0.71
Other feed stuffs (lb)	82.15	3.44
Veterinary		4.97
Supplies		3.67
Fuel & oil		3.13
Repairs		5.07
Custom hire		2.36
Livestock leases		0.27
Bedding		0.62
Operating interest		1.71
Total direct expenses		88.24
Return over direct expense		57.01
Overhead Expenses		
Hired labor		3.95
Farm insurance		2.30
Interest		1.69
Mach & bldg depreciation		7.68
Miscellaneous		6.08
Total overhead expenses		21.71
Total dir & ovhd expenses		109.94
Net return		35.30
Labor & management charge		11.01
Net return over lbr & mgt		24.29
Cost of Production Per Cwt. Produced		
Total direct expense per unit		88.24
Total dir & ovhd expense per unit		109.94
With other revenue adjustments		128.17
With labor and management		139.17
Est. labor hours per unit		0.69
Other Information		
Number of cows		238.7
Pregnancy percentage		96.1
Pregnancy loss percentage		0.8
Culling percentage		17.9
Calving percentage		95.3
Weaning percentage		89.1
Calves sold per cow		0.93
Calf death loss percent		6.6
Cow death loss percent		1.6
Average weaning weight		570
Lb. weaned/exposed female		508
Feed cost per cow		364.25
Avg wgt/ Beef Calves sold		631
Avg price / cwt.		157.31

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

Beef Cow-Calf -- Average Per Cow

	<u>Avg. Of</u>	
	<u>All Farms</u>	
Number of farms	18	
	Quantity	Value
Beef Calves sold (lb)	125.2	196.88
Transferred out (lb)	423.2	697.30
Cull sales		160.22
Other income		12.25
Purchased		-123.41
Transferred in		-176.41
Inventory change		-10.46
Gross margin		796.48
Direct Expenses		
Protein Vit Minerals (lb.)	139.0	21.96
Creep / Starter (lb.)	91.9	10.65
Corn Silage (lb.)	1,496.3	20.98
Hay, Alfalfa (lb.)	570.9	20.81
Hay, Grass (lb.)	4,519.4	118.22
Pasture (aum)	7.2	140.66
Stover (lb.)	341.3	3.90
Other feed stuffs (lb)	638.1	27.06
Veterinary		27.26
Supplies		20.14
Fuel & oil		17.18
Repairs		27.78
Custom hire		12.96
Livestock leases		1.50
Bedding		3.40
Operating interest		9.40
Total direct expenses		483.88
Return over direct expense		312.61
Overhead Expenses		
Hired labor		21.68
Farm insurance		12.61
Interest		9.27
Mach & bldg depreciation		42.14
Miscellaneous		33.33
Total overhead expenses		119.03
Total dir & ovhd expenses		602.91
Net return		193.57
Labor & management charge		60.35
Net return over lbr & mgt		133.23
Cost of Production Per Cwt. Produced		
Total direct expense per unit		88.24
Total dir & ovhd expense per unit		109.94
With other revenue adjustments		128.17
With labor and management		139.17
Est. labor hours per unit		3.81
Other Information		
Number of cows		238.7
Pregnancy percentage		96.1
Pregnancy loss percentage		0.8
Culling percentage		17.9
Calving percentage		95.3
Weaning percentage		89.1
Calves sold per cow		0.93
Calf death loss percent		6.6
Cow death loss percent		1.6
Average weaning weight		570
Lb. weaned/exposed female		508
Feed cost per cow		364.25
Avg wgt/ Beef Calves sold		631
Avg price / cwt.		157.31

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	5	
	Quantity	Value
Beef Calves sold (lb)	56.66	88.35
Transferred out (lb)	41.10	60.99
Cull sales		11.80
Other income		0.79
Purchased		-9.98
Transferred in		-21.05
Inventory change		9.59
Gross margin		146.27
Direct Expenses		
Protein Vit Minerals (lb.)	28.36	5.31
Complete Ration (lb.)	47.27	2.03
Corn Silage (lb.)	1,440.65	20.32
Hay, Alfalfa (lb.)	80.36	3.21
Hay, Grass (lb.)	770.66	20.44
Oats (bu.)	0.30	0.53
Pasture (aum)	1.01	21.47
Stover (lb.)	30.37	0.47
DDGS, dry (lb.)	157.58	1.38
Other feed stuffs (lb)	153.82	2.81
Veterinary		3.84
Supplies		3.23
Fuel & oil		4.21
Repairs		7.21
Custom hire		3.72
Marketing		2.60
Operating interest		1.18
Total direct expenses		103.97
Return over direct expense		42.30
Overhead Expenses		
Machinery leases		1.29
Farm insurance		2.56
Utilities		2.08
Mach & bldg depreciation		5.70
Miscellaneous		2.46
Total overhead expenses		14.09
Total dir & ovhd expenses		118.06
Net return		28.20
Labor & management charge		12.97
Net return over lbr & mgt		15.23
Cost of Production Per Cwt. Produced		
Total direct expense per unit		103.97
Total dir & ovhd expense per unit		118.06
With other revenue adjustments		128.34
With labor and management		141.30
Est. labor hours per unit		0.80
Other Information		
Number of cows		158.8
Pregnancy percentage		97.4
Pregnancy loss percentage		0.6
Culling percentage		9.6
Calving percentage		96.7
Weaning percentage		93.5
Calves sold per cow		0.91
Calf death loss percent		4.0
Cow death loss percent		1.3
Average weaning weight		537
Lb. weaned/exposed female		502
Feed cost per cow		498.62
Avg wgt/ Beef Calves sold		649
Avg price / cwt.		155.95

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

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

	<u>Avg. Of All Farms</u>	
Number of farms	5	
	Quantity	Value
Beef Calves sold (lb)	362.3	564.93
Transferred out (lb)	262.8	389.99
Cull sales		75.42
Other income		5.04
Purchased		-63.84
Transferred in		-134.57
Inventory change		61.33
Gross margin		935.23
Direct Expenses		
Protein Vit Minerals (lb.)	181.4	33.96
Complete Ration (lb.)	302.3	13.00
Corn Silage (lb.)	9,211.6	129.94
Hay, Alfalfa (lb.)	513.9	20.55
Hay, Grass (lb.)	4,927.6	130.69
Oats (bu.)	1.9	3.40
Pasture (aum)	6.5	137.27
Stover (lb.)	194.2	3.02
DDGS, dry (lb.)	1,007.6	8.82
Other feed stuffs (lb)	983.6	17.97
Veterinary		24.54
Supplies		20.64
Fuel & oil		26.89
Repairs		46.12
Custom hire		23.81
Marketing		16.64
Operating interest		7.53
Total direct expenses		664.79
Return over direct expense		270.44
Overhead Expenses		
Machinery leases		8.27
Farm insurance		16.37
Utilities		13.28
Mach & bldg depreciation		36.47
Miscellaneous		15.72
Total overhead expenses		90.12
Total dir & ovhd expenses		754.91
Net return		180.32
Labor & management charge		82.92
Net return over lbr & mgt		97.41
Cost of Production Per Cwt. Produced		
Total direct expense per unit		103.97
Total dir & ovhd expense per unit		118.06
With other revenue adjustments		128.34
With labor and management		141.30
Est. labor hours per unit		5.14
Other Information		
Number of cows		158.8
Pregnancy percentage		97.4
Pregnancy loss percentage		0.6
Culling percentage		9.6
Calving percentage		96.7
Weaning percentage		93.5
Calves sold per cow		0.91
Calf death loss percent		4.0
Cow death loss percent		1.3
Average weaning weight		537
Lb. weaned/exposed female		502
Feed cost per cow		498.62
Avg wgt/ Beef Calves sold		649
Avg price / cwt.		155.95

Livestock Enterprise Analysis
North Dakota Farm Business Management Education Program
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Beef Replacement Heifers -- Average Per Head

	<u>Avg. Of All Farms</u>	
Number of farms	13	
	Quantity	Value
Beef Replace sold (hd)	0.09	132.55
Transferred out (hd)	0.90	1,357.57
Cull sales (hd)	0.02	17.07
Other income		-
Purchased (hd)	0.01	-14.56
Transferred in (hd)	0.69	-577.46
Inventory change (hd)	-0.30	-243.23
Gross margin		679.53
Direct Expenses		
Protein Vit Minerals (lb.)	91.41	19.49
Complete Ration (lb.)	189.23	8.01
Corn Silage (lb.)	2,485.30	36.94
Hay, Alfalfa (lb.)	250.36	9.18
Hay, Grass (lb.)	2,101.71	60.04
Pasture (aum)	5.70	109.79
Straw (lb.)	645.80	7.98
DDGS, dry (lb.)	97.99	5.43
Other feed stuffs (lb)	142.00	12.90
Breeding fees		3.70
Veterinary		18.03
Supplies		2.74
Fuel & oil		4.39
Repairs		6.64
Custom hire		6.08
Operating interest		2.07
Total direct expenses		313.41
Return over direct expense		366.12
Overhead Expenses		
Hired labor		6.36
Farm insurance		4.15
Utilities		2.91
Dues & professional fees		1.88
Interest		1.96
Mach & bldg depreciation		12.66
Miscellaneous		5.74
Total overhead expenses		35.65
Total dir & ovhd expenses		349.06
Net return		330.46
Labor & management charge		17.46
Net return over lbr & mgt		313.00
Est. labor hours per unit		1.01
Other Information		
No. purchased or trans in		37
Number sold or trans out		52
Average number of head		53
Percentage death loss		0.4
Feed cost per average head		269.76
Feed cost/head sold/trans		274.14

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

Beef Replacement Heifers -- Average Per Head Sold/Trans

	<u>Avg. Of All Farms</u>	
Number of farms	13	
	Quantity	Value
Beef Replace sold (hd)	0.1	134.71
Transferred out (hd)	0.9	1,379.66
Cull sales (hd)	0.0	17.35
Other income		-
Purchased (hd)	0.0	-14.79
Transferred in (hd)	0.7	-586.86
Inventory change (hd)	-0.3	-247.19
Gross margin		690.58
Direct Expenses		
Protein Vit Minerals (lb.)	92.9	19.80
Complete Ration (lb.)	192.3	8.14
Corn Silage (lb.)	2,525.7	37.54
Hay, Alfalfa (lb.)	254.4	9.33
Hay, Grass (lb.)	2,135.9	61.02
Pasture (aum)	5.8	111.58
Straw (lb.)	656.3	8.11
DDGS, dry (lb.)	99.6	5.52
Other feed stuffs (lb)	144.3	13.11
Breeding fees		3.76
Veterinary		18.32
Supplies		2.78
Fuel & oil		4.46
Repairs		6.75
Custom hire		6.18
Operating interest		2.10
Total direct expenses		318.51
Return over direct expense		372.07
Overhead Expenses		
Hired labor		6.46
Farm insurance		4.21
Utilities		2.96
Dues & professional fees		1.91
Interest		1.99
Mach & bldg depreciation		12.87
Miscellaneous		5.83
Total overhead expenses		36.23
Total dir & ovhd expenses		354.74
Net return		335.84
Labor & management charge		17.74
Net return over lbr & mgt		318.10
Est. labor hours per unit		1.03
Other Information		
No. purchased or trans in		37
Number sold or trans out		52
Average number of head		53
Percentage death loss		0.4
Feed cost per average head		269.76
Feed cost/head sold/trans		274.14

Livestock Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(Farms Sorted By Net Return)

Beef Backgrounding -- Average Per Cwt. Produced

	<u>Avg. Of All Farms</u>	
Number of farms	7	
	Quantity	Value
Backgnd Beef sold (lb)	169.10	238.72
Transferred out (lb)	160.53	239.22
Other income		-
Purchased (lb)	-14.96	-21.96
Transferred in (lb)	-252.79	-424.25
Inventory change (lb)	38.11	49.44
Gross margin		81.17
Direct Expenses		
Protein Vit Minerals (lb.)	7.60	2.97
Complete Ration (lb.)	56.25	5.26
Corn (bu.)	3.20	8.98
Corn Silage (lb.)	363.51	5.15
Corn, Ear (lb.)	30.07	1.62
Hay, Grass (lb.)	345.93	8.26
Oats (bu.)	0.90	2.07
Stover (lb.)	47.17	0.59
Screenings, Heavy (lb.)	48.10	1.60
DDGS, dry (lb.)	34.28	1.86
DDGS, wet (lb.)	35.31	1.09
Other feed stuffs (lb)	98.24	3.02
Veterinary		2.65
Supplies		1.88
Fuel & oil		2.06
Repairs		3.64
Custom hire		0.66
Marketing		1.66
Bedding		0.66
Total direct expenses		55.69
Return over direct expense		25.48
Overhead Expenses		
Hired labor		2.98
Mach & bldg depreciation		3.38
Miscellaneous		6.89
Total overhead expenses		13.26
Total dir & ovhd expenses		68.95
Net return		12.22
Labor & management charge		5.61
Net return over lbr & mgt		6.61
Cost of Production Per Cwt. Produced		
Total direct expense per unit		137.26
Total dir & ovhd expense per unit		141.28
With other revenue adjustments		141.28
With labor and management		142.99
Est. labor hours per unit		0.42
Other Information		
No. purchased or trans in		321
Number sold or trans out		292
Percentage death loss		0.6
Avg. daily gain (lb.)		2.03
Lb. of conc / lb. of gain		4.21
Lb. of feed / lb. of gain		10.20
Feed cost per cwt. of gain		42.49
Feed cost per head		83.94
Avg wgt / Backgnd Beef sold		762
Avg sales price / cwt.		141.17

Livestock Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2017
(Farms Sorted By Net Return)

Beef Backgrounding -- Average Per Head

	<u>Avg. Of All Farms</u>	
Number of farms	7	
	Quantity	Value
Backgnd Beef sold (lb)	334.1	471.66
Transferred out (lb)	317.2	472.64
Other income		-
Purchased (lb)	-29.5	-43.39
Transferred in (lb)	-499.4	-838.22
Inventory change (lb)	75.3	97.69
Gross margin		160.37
Direct Expenses		
Protein Vit Minerals (lb.)	15.0	5.87
Complete Ration (lb.)	111.1	10.39
Corn (bu.)	6.3	17.75
Corn Silage (lb.)	718.2	10.17
Corn, Ear (lb.)	59.4	3.21
Hay, Grass (lb.)	683.5	16.33
Oats (bu.)	1.8	4.10
Stover (lb.)	93.2	1.16
Screenings, Heavy (lb.)	95.0	3.16
DDGS, dry (lb.)	67.7	3.67
DDGS, wet (lb.)	69.8	2.15
Other feed stuffs (lb)	194.1	5.98
Veterinary		5.24
Supplies		7.79
Repairs		7.18
Custom hire		1.30
Marketing		3.28
Bedding		1.30
Total direct expenses		110.03
Return over direct expense		50.34
Overhead Expenses		
Hired labor		5.90
Mach & bldg depreciation		6.69
Miscellaneous		13.61
Total overhead expenses		26.19
Total dir & ovhd expenses		136.22
Net return		24.15
Labor & management charge		11.09
Net return over lbr & mgt		13.06
Cost of Production Per Cwt. Produced		
Total direct expense per unit		137.26
Total dir & ovhd expense per unit		141.28
With other revenue adjustments		141.28
With labor and management		142.99
Est. labor hours per unit		0.83
Other Information		
No. purchased or trans in		321
Number sold or trans out		292
Percentage death loss		0.6
Avg. daily gain (lb.)		2.03
Lb. of conc / lb. of gain		4.21
Lb. of feed / lb. of gain		10.20
Feed cost per cwt. of gain		42.49
Feed cost per head		83.94
Avg wgt / Backgnd Beef sold		762
Avg sales price / cwt.		141.17

Figure 1. Gross Cash Income Per Farm

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

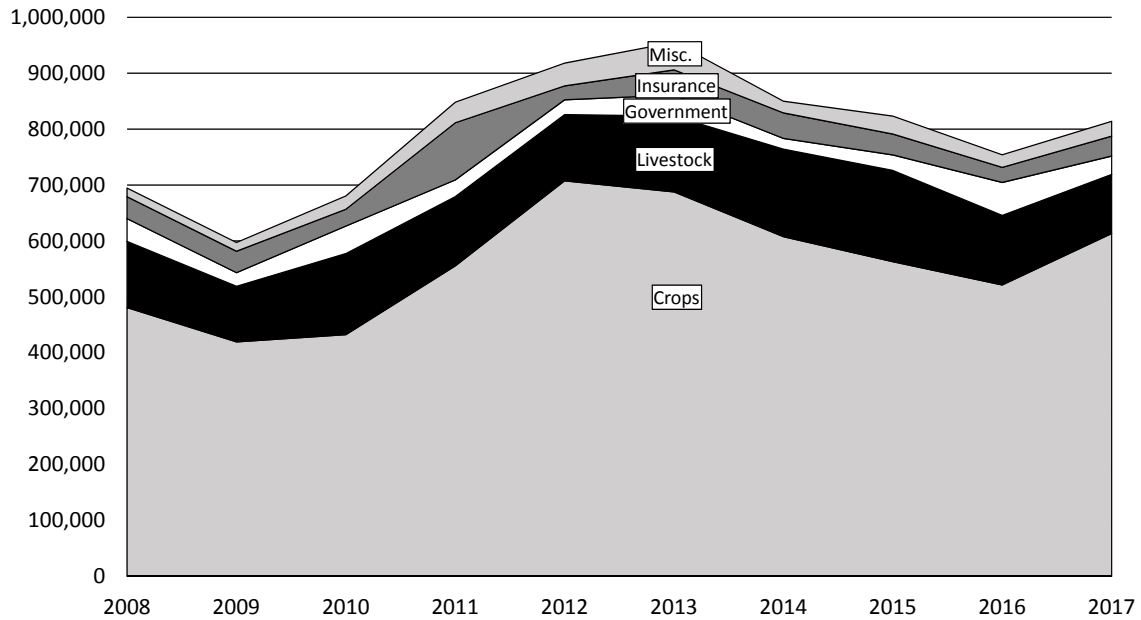
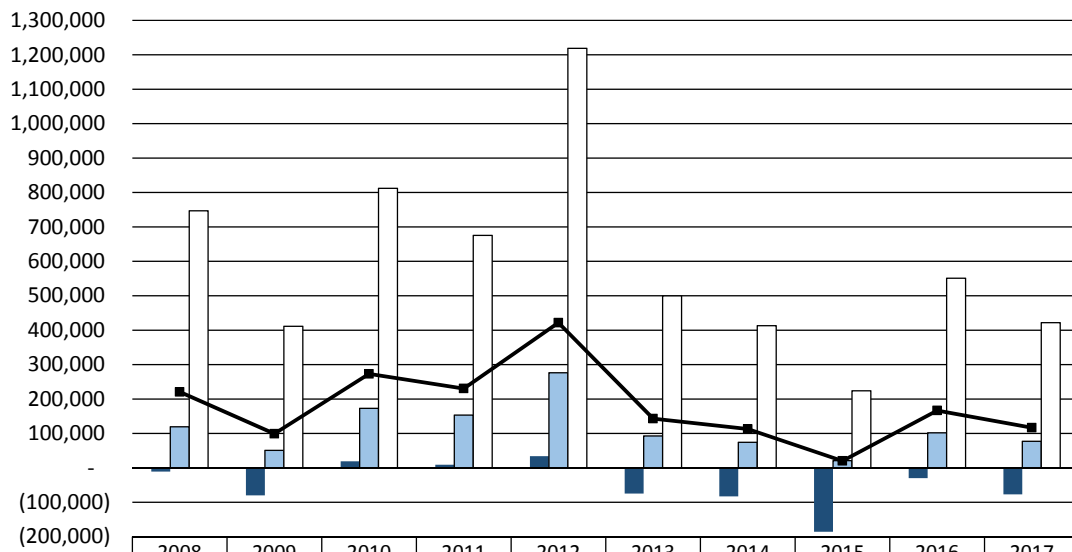


Figure 2. Net Farm Income (Accrual) Per Farm

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



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
20% Low Profit	(10,824)	(80,051)	18,966	9,070	33,841	(74,624)	(82,920)	(185,675)	(29,894)	(77,071)
Middle 60% Profit	119,505	50,872	172,967	153,465	276,221	92,662	74,456	20,908	101,747	77,117
20% High Profit	746,887	411,327	812,055	675,386	1,218,68	499,860	413,037	223,916	550,974	421,964
Average of All	220,630	99,091	273,012	230,398	421,735	143,105	112,920	20,193	166,574	116,714

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

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

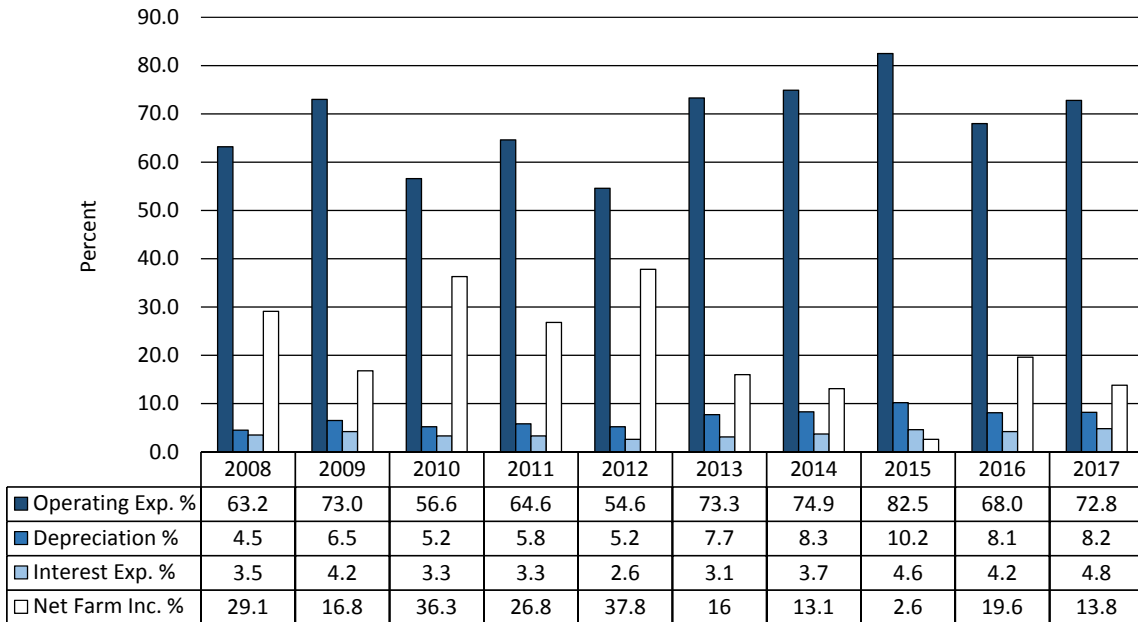


Figure 4. Profitability Measures Per Farm

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

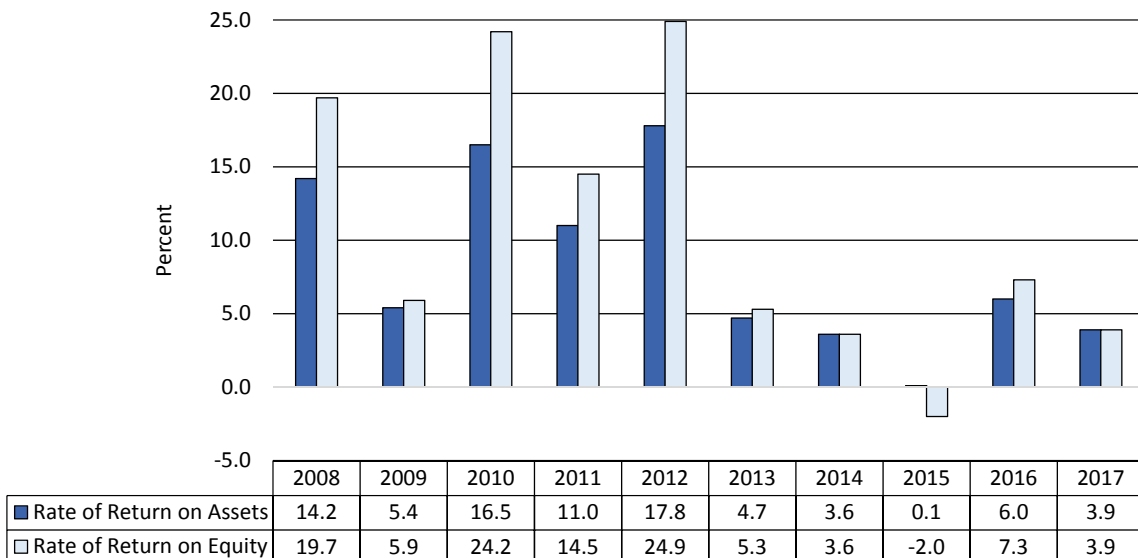


Figure 5. Assets and Liabilities Per Farm, 2017

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

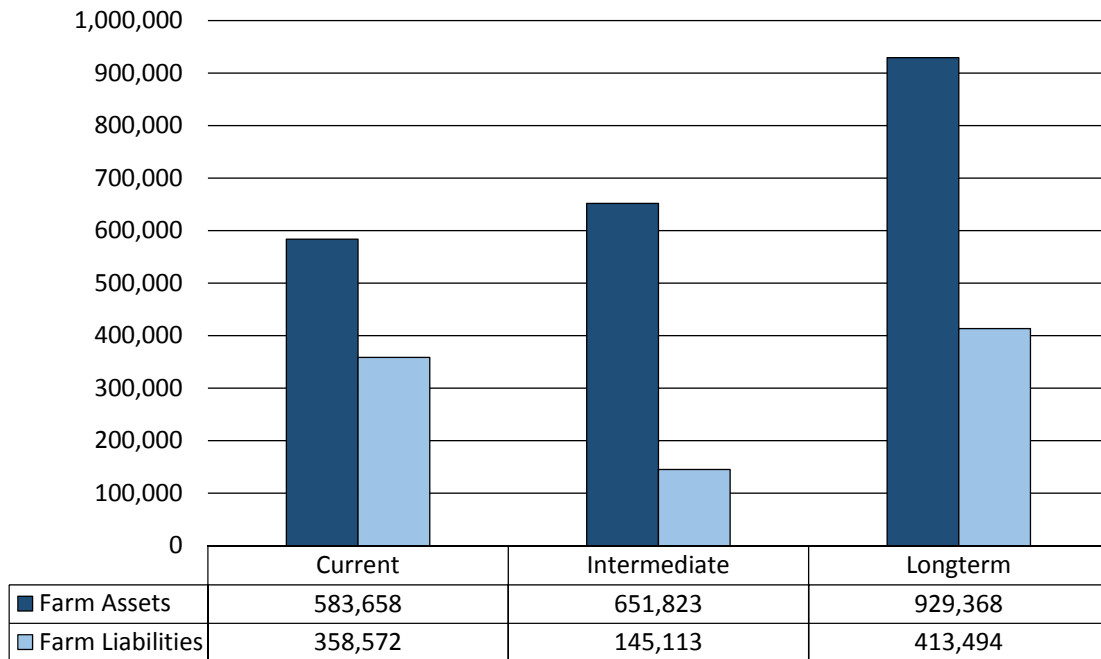


Figure 6. Total Farm Assets and Liabilities

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

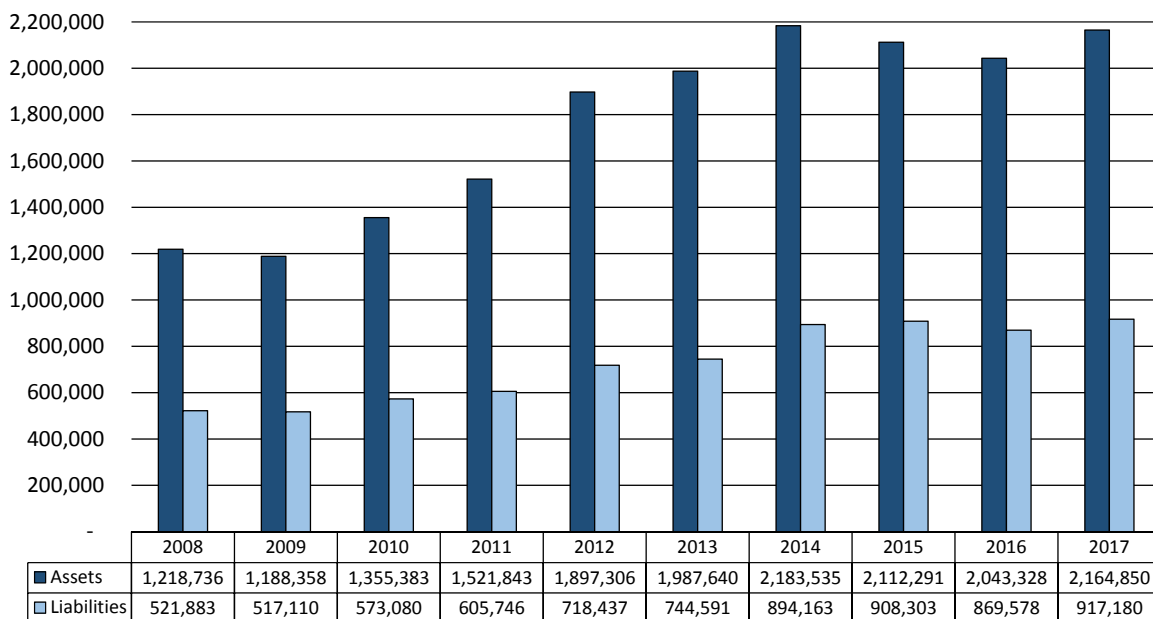


Figure 7. Household and Personal Expenses

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

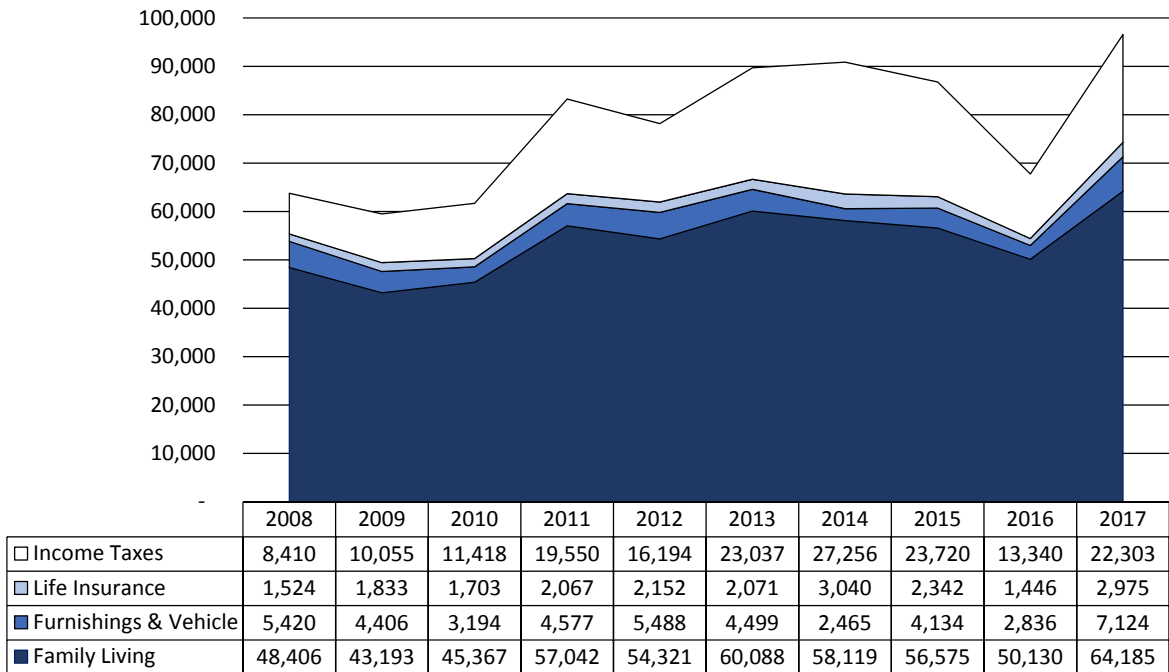


Figure 8. Crop Acreage Per Farm

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

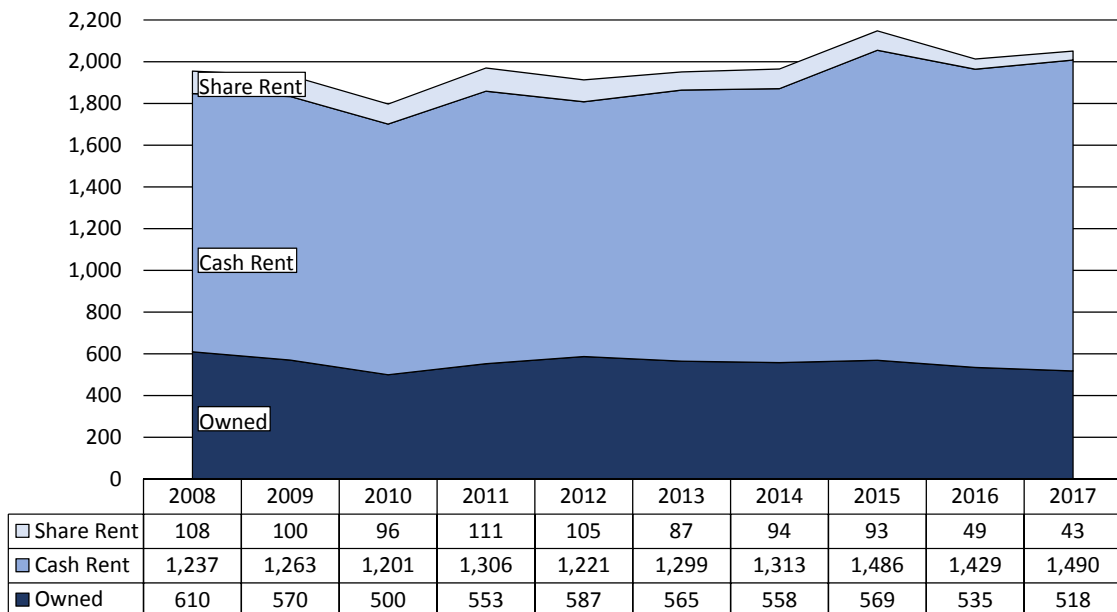


Figure 9. Spring Wheat Costs Per Acre

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

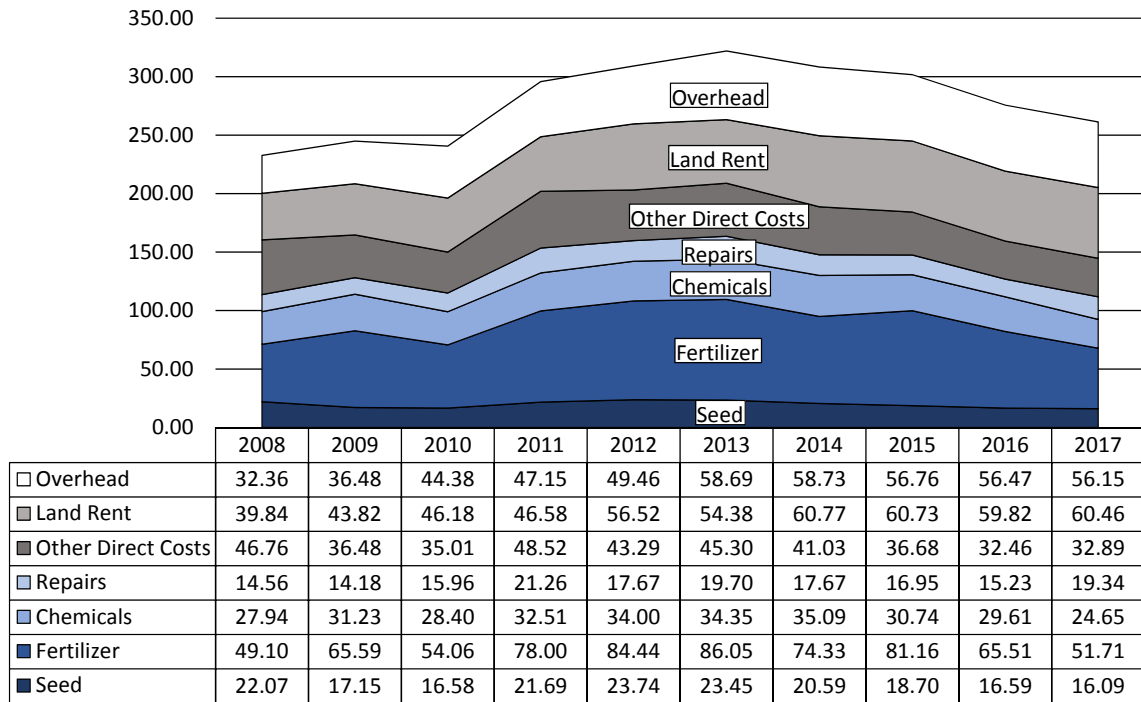


Figure 10. Average Net Return Per Beef Cow

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

