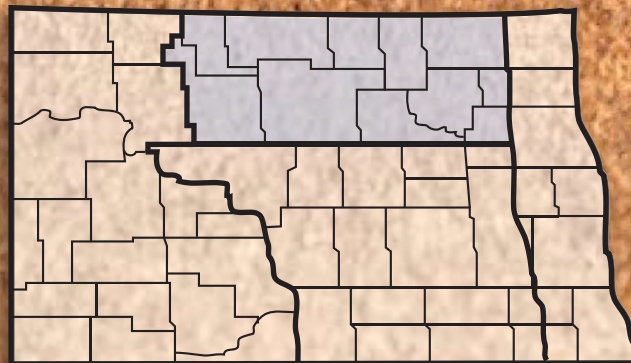


2017 ANNUAL REPORT

North Central North Dakota

North Dakota Farm and Ranch Business
Management Education



www.ndfarmmanagement.com



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NORTH DAKOTA FARM BUSINESS MANAGEMENT EDUCATION

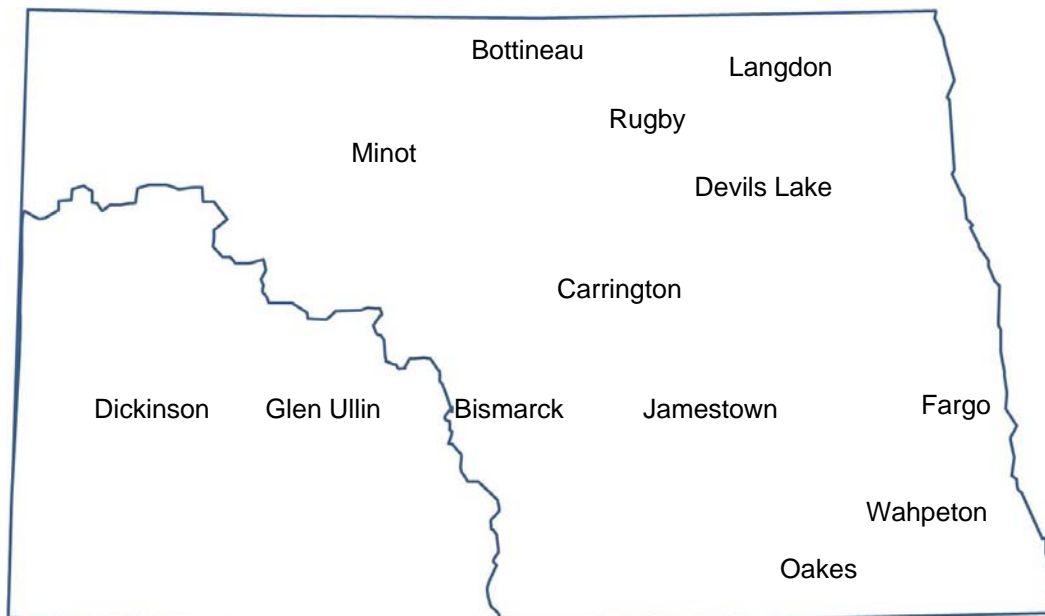
REGION 2 – NORTH CENTRAL AVERAGES 2017 ANNUAL REPORT

The North Central (Region 2) farm business analyses were submitted by the following instructors represented by their cooperating schools.

<u>School</u>	<u>Instructor</u>
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Dakota College at Bottineau - Minot	BillieJo Shae
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Lake Region State College - Devils Lake.....	Jason Fewell Darren Wilcox
Lake Region State College - Langdon	Jeremiah Halley

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.

Location of all Farm Business Management Education Programs in North Dakota



2017 North 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 2 - North 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	136	27	27	28
Cash Farm Income				
Barley	46,062	18,890	30,310	108,997
Beans, Garbonzo	4,839	-	-	23,506
Beans, Navy	1,953	6,372	-	-
Beans, Pinto	31,631	30,128	898	99,794
Canola	61,308	44,027	31,682	125,288
Corn	31,317	31,339	23,217	49,557
Flax	3,282	3,949	4,041	2,964
Hay, Grass	460	-	-	-
Oats	1,487	-	-	654
Peas, Field	9,830	5,520	2,536	25,476
Potatoes	5,998	30,213	-	-
Safflower	40	200	-	-
Soybeans	151,918	106,800	133,210	274,609
Sunflowers	14,930	5,179	1,867	24,119
Wheat, Durum	9,410	8,222	3,962	20,715
Wheat, Spring	154,435	125,531	88,947	320,471
Wheat, Winter	719	1,055	-	2,475
Soybeans, Natto	2,375	-	-	8,132
Hay	104	-	148	-
Miscellaneous crop income	732	-	161	2,511
Beef Bulls	34	136	38	-
Beef Cow-Calf, Beef Calves	24,451	51,105	39,521	2,846
Beef Replacement Heifers	730	2,206	433	-
Beef Backgrounding	9,300	16,473	10,475	-
Beef Finishing	1,102	-	-	-
Cull breeding livestock	4,995	11,676	7,520	203
Misc. livestock income	839	206	73	470
Crop government payments	40,632	29,841	27,124	78,018
CRP payments	1,406	1,798	1,761	1,612
Other government payments	13,954	11,759	17,709	15,226
Custom work income	11,173	13,650	4,517	16,795
Patronage dividends, cash	8,851	6,317	4,933	19,259
Crop insurance income	36,704	44,815	43,702	50,517
Property insurance income	1,946	804	635	6,615
Sale of resale items	1,131	3,045	-	2,471
Other farm income	9,521	8,317	5,260	17,407
Gross Cash Farm Income	699,597	619,570	484,677	1,300,706

Farm Income Statement (continued)
North Dakota Farm Business Management Education Program
Region 2 - North 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	136	27	27	28
Cash Farm Expense				
Seed and plants	80,816	66,725	51,307	151,101
Fertilizer	76,683	59,548	43,376	157,719
Crop chemicals	71,260	79,846	33,750	134,695
Cover crop expense	229	204	-	283
Crop insurance	30,435	24,316	19,314	60,014
Drying expense	406	135	49	757
Storage	304	1,111	-	335
Irrigation energy	56	-	206	73
Crop marketing	988	1,040	200	2,549
Crop miscellaneous	1,712	2,663	1,171	3,310
Consultants	1,736	761	845	3,584
Feeder livestock purchase	4,697	1,383	742	817
Purchased feed	5,344	9,804	8,369	792
Veterinary	1,889	2,794	3,791	305
Supplies	1,053	2,606	999	306
Livestock insurance	40	143	-	-
Livestock marketing	268	411	455	-
Interest	29,703	36,640	22,017	39,672
Fuel & oil	28,238	27,556	22,408	45,640
Repairs	52,417	61,432	42,360	81,885
Custom hire	14,737	12,057	10,420	25,640
Hired labor	17,156	16,589	9,526	35,818
Land rent	79,708	72,389	57,405	142,460
Machinery leases	10,493	7,874	9,330	11,751
Building leases	1,057	961	278	3,346
Real estate taxes	4,468	3,139	3,205	8,180
Farm insurance	9,365	9,693	7,965	14,195
Utilities	6,965	7,998	5,295	10,963
Dues & professional fees	1,707	2,315	1,306	1,842
Purchase of resale items	738	-	-	3,584
Miscellaneous	5,564	5,930	4,120	9,681
Total cash expense	540,231	518,062	360,209	951,298
Net cash farm income	159,366	101,508	124,469	349,408
Inventory Changes				
Prepays and supplies	2,909	-16,636	-4,503	24,742
Accounts receivable	-5,948	-12,422	-4,956	-12,158
Hedging accounts	-1,521	-1,410	-2,980	-5,244
Other current assets	41	527	75	1,849
Crops and feed	15,934	-56,973	5,688	103,283
Market livestock	5,757	-3,549	1,959	32
Breeding livestock	-2,584	-6,327	-4,890	374
Other assets	2,211	1,630	4	4,246
Accounts payable	1,405	5,209	1,628	3,999
Accrued interest	-969	-288	-566	-284
Total inventory change	17,236	-90,238	-8,542	120,838
Net operating profit	176,601	11,270	115,927	470,246
Depreciation				
Machinery and equipment	-53,093	-43,939	-38,012	-106,089
Titled vehicles	-6,384	-6,074	-3,632	-7,257
Buildings and improvements	-4,030	-3,004	-2,070	-10,647
Total depreciation	-63,506	-53,017	-43,713	-123,993
Net farm income from operations	113,095	-41,747	72,214	346,253
Gain or loss on capital sales	557	-2,827	-214	2,955
Net farm income	113,652	-44,574	72,000	349,208

Inventory Changes
North Dakota Farm Business Management Education Program
Region 2 - North 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	136	27	27	28
Net cash farm income	159,366	101,508	124,469	349,408
Crops and Feed				
Ending inventory	436,369	290,181	249,517	1,030,608
Beginning inventory	420,435	347,153	243,829	927,325
Inventory change	15,934	-56,973	5,688	103,283
Market Livestock				
Ending inventory	32,193	49,184	38,648	3,516
Beginning inventory	26,437	52,733	36,690	3,484
Inventory change	5,757	-3,549	1,959	32
Accts Receivable				
Ending inventory	15,960	17,695	16,876	26,532
Beginning inventory	21,908	30,117	21,833	38,690
Inventory change	-5,948	-12,422	-4,956	-12,158
Prepaid Expenses and Supplies				
Ending inventory	49,662	20,150	31,455	124,582
Beginning inventory	46,752	36,787	35,957	99,841
Inventory change	2,909	-16,636	-4,503	24,742
Hedging Activities				
Ending inventory	2,937	974	1,081	6,664
Withdrawals	2,998	442	770	5,250
Beginning inventory	3,288	1,494	2,290	7,305
Deposits	4,167	1,332	2,541	9,854
Gain or loss	-1,521	-1,410	-2,980	-5,244
Other Current Assets				
Ending inventory	1,256	943	359	2,605
Beginning inventory	1,215	416	284	756
Inventory change	41	527	75	1,849
Breeding Livestock				
Ending inventory	68,819	126,673	104,981	4,950
Capital sales	2,735	2,734	3,397	810
Beginning inventory	68,827	124,318	109,734	5,386
Capital purchases	5,311	11,417	3,535	-
Depreciation, capital adjust	-2,584	-6,327	-4,890	374
Other Capital Assets				
Ending inventory	72,950	24,526	73,437	162,060
Capital sales	1,010	121	1,732	2,843
Beginning inventory	68,171	21,817	73,665	152,587
Capital purchases	3,578	1,199	1,500	8,071
Depreciation, capital adjust	2,211	1,630	4	4,246
Accounts Payable				
Beginning inventory	19,557	44,451	6,020	25,675
Ending inventory	18,152	39,243	4,392	21,676
Inventory change	1,405	5,209	1,628	3,999
Accrued Interest				
Beginning inventory	14,539	23,223	9,737	17,346
Ending inventory	15,508	23,510	10,303	17,629
Inventory change	-969	-288	-566	-284
Total inventory change	17,236	-90,238	-8,542	120,838
Net operating profit	176,601	11,270	115,927	470,246

Depreciation
North Dakota Farm Business Management Education Program
Region 2 - North 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	136	27	27	28
Net operating profit	176,601	11,270	115,927	470,246
Machinery and Equipment				
Ending inventory	618,491	474,179	432,334	1,264,116
Capital sales	22,143	28,609	4,449	41,967
Beginning inventory	601,712	481,295	421,735	1,218,795
Capital purchases	92,015	65,433	53,060	193,378
Depreciation, capital adjust.	-53,093	-43,939	-38,012	-106,089
Titled Vehicles				
Ending inventory	48,700	63,623	34,414	65,151
Capital sales	1,307	1,048	335	2,314
Beginning inventory	45,822	55,680	33,199	64,094
Capital purchases	10,570	15,066	5,181	10,627
Depreciation, capital adjust.	-6,384	-6,074	-3,632	-7,257
Buildings and Improvements				
Ending inventory	132,455	113,025	68,202	319,836
Capital sales	107	537	-	-
Beginning inventory	127,592	101,418	63,704	316,844
Capital purchases	8,999	15,148	6,568	13,639
Depreciation, capital adjust.	-4,030	-3,004	-2,070	-10,647
Total depreciation, capital adj.	-63,506	-53,017	-43,713	-123,993
Net farm income from operations	113,095	-41,747	72,214	346,253
Gain or loss on capital sales	557	-2,827	-214	2,955
Net farm income	113,652	-44,574	72,000	349,208

Profitability Measures
North Dakota Farm Business Management Education Program
Region 2 - North 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	136	27	27	28
Profitability (assets valued at cost)				
Net farm income from operations	113,095	-41,747	72,214	346,253
Rate of return on assets	4.5 %	-3.0 %	3.8 %	7.5 %
Rate of return on equity	4.8 %	-12.7 %	3.4 %	9.1 %
Operating profit margin	12.8 %	-9.3 %	11.1 %	21.3 %
Asset turnover rate	35.2 %	32.2 %	34.2 %	35.4 %
Farm interest expense	30,672	36,928	22,583	39,956
Value of operator lbr and mgmt.	53,577	44,189	42,772	91,225
Return on farm assets	90,190	-49,008	52,025	294,984
Average farm assets	1,998,079	1,642,771	1,374,579	3,919,901
Return on farm equity	59,517	-85,936	29,442	255,028
Average farm equity	1,232,591	676,179	874,539	2,812,914
Value of farm production	702,405	529,504	470,390	1,386,139

Liquidity & Repayment Capacity Measures
North Dakota Farm Business Management Education Program
Region 2 - North 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	136	27	27	28
Liquidity				
Current ratio	1.90	1.12	1.67	2.49
Working capital	290,636	45,278	148,592	835,700
Working capital to gross inc	40.8 %	8.4 %	31.0 %	60.1 %
Current assets	613,197	419,409	371,431	1,395,175
Current liabilities	322,561	374,131	222,839	559,475
Gross revenues (accrual)	713,184	540,690	479,501	1,391,331
Repayment capacity				
Net farm income from operations	113,095	-41,747	72,214	346,253
Depreciation	63,506	53,017	43,713	123,993
Personal income	32,111	28,151	35,456	44,025
Family living/owner withdrawals	-69,543	-60,460	-66,836	-104,962
Cash discrepancy	-7	302	-83	-125
Payments on personal debt	-3,729	-3,996	-4,034	-4,131
Income taxes paid	-17,287	-5,204	-13,677	-40,709
Interest on term debt	20,999	30,149	14,618	26,691
Capital debt repayment capacity	139,152	-91	81,455	391,160
Scheduled term debt payments	-82,889	-98,593	-55,806	-131,661
Capital debt repayment margin	56,263	-98,684	25,649	259,499
Cash replacement allowance	-28,302	-14,735	-20,869	-62,503
Replacement margin	27,961	-113,419	4,779	196,996
Term debt coverage ratio	1.68	0.00	1.46	2.97
Replacement coverage ratio	1.25	0.00	1.06	2.01

Balance Sheet at Cost Values
North Dakota Farm Business Management Education Program
Region 2 - North 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	136	27	27	28
Assets				
Current Farm Assets				
Cash and checking balance	74,820	40,281	33,494	200,668
Prepaid expenses & supplies	49,662	20,150	31,455	124,582
Growing crops	795	773	75	1,756
Accounts receivable	15,960	17,695	16,876	26,532
Hedging accounts	2,937	974	1,081	6,664
Crops held for sale or feed	436,369	290,181	249,517	1,030,608
Market livestock held for sale	32,193	49,184	38,648	3,516
Other current assets	460	170	284	849
Total current farm assets	613,197	419,409	371,431	1,395,175
Intermediate Farm Assets				
Breeding livestock	68,819	126,673	104,981	4,950
Machinery and equipment	618,491	474,179	432,334	1,264,116
Titled vehicles	48,700	63,623	34,414	65,151
Other intermediate assets	48,528	7,980	67,750	90,229
Total intermediate farm assets	784,539	672,455	639,479	1,424,447
Long Term Farm Assets				
Farm land	481,640	387,082	312,361	804,058
Buildings and improvements	132,455	113,025	68,202	319,836
Other long-term assets	24,423	16,546	5,687	71,831
Total long-term farm assets	638,517	516,653	386,251	1,195,725
Total Farm Assets	2,036,252	1,608,517	1,397,161	4,015,347
Total Nonfarm Assets	304,605	254,831	252,910	549,671
Total Assets	2,340,858	1,863,348	1,650,071	4,565,017
Liabilities				
Current Farm Liabilities				
Accrued interest	15,508	23,510	10,303	17,629
Accounts payable	18,152	39,243	4,392	21,676
Current notes	229,011	247,339	164,976	424,105
Principal due on term debt	59,889	64,038	43,168	96,064
Total current farm liabilities	322,561	374,131	222,839	559,475
Total intermediate farm liabs	171,207	235,011	133,467	242,940
Total long term farm liabilities	285,919	363,483	155,004	288,243
Total farm liabilities	779,686	972,625	511,310	1,090,657
Total nonfarm liabilities	61,189	65,730	89,146	70,348
Total liabilities	840,875	1,038,354	600,456	1,161,006
Net worth (farm and nonfarm)	1,499,983	824,994	1,049,615	3,404,012
Net worth change	67,177	-71,567	31,000	265,280
Percent net worth change	5 %	-8 %	3 %	8 %
Ratio Analysis				
Current farm liabilities / assets	53 %	89 %	60 %	40 %
Intermediate farm liab. / assets	22 %	35 %	21 %	17 %
Long term farm liab. / assets	45 %	70 %	40 %	24 %
Total debt to asset ratio	36 %	56 %	36 %	25 %

Statement Of Cash Flows
North Dakota Farm Business Management Education Program
Region 2 - North 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	136	27	27	28
Beginning cash (farm & nonfarm)	84,989	40,103	17,722	227,512
Cash Provided By Operating Activities				
Gross cash farm income	699,597	619,570	484,677	1,300,706
Total cash farm expense	-540,231	-518,062	-360,209	-951,298
Net cash from hedging transactions	-1,169	-890	-1,771	-4,604
Cash provided by operating	158,196	100,618	122,698	344,805
Cash Provided By Investing Activities				
Sale of breeding livestock	2,657	2,734	3,397	810
Sale of machinery & equipment	20,424	24,947	3,734	39,664
Sale of titled vehicles	1,512	1,967	519	2,248
Sale of farm land	6,823	296	12,934	8,170
Sale of farm buildings	66	333	-	-
Sale of other farm assets	1,010	121	1,732	2,843
Sale of nonfarm assets	1,261	3,807	302	422
Purchase of breeding livestock	-5,311	-11,417	-3,535	-
Purchase of machinery & equip.	-92,015	-65,433	-53,060	-193,378
Purchase of titled vehicles	-10,570	-15,066	-5,181	-10,627
Purchase of farm land	-34,572	-	-32,949	-21,004
Purchase of farm buildings	-8,999	-15,148	-6,568	-13,639
Purchase of other farm assets	-3,578	-1,199	-1,500	-8,071
Purchase of nonfarm assets	-17,620	-26,347	-4,803	-36,762
Cash provided by investing	-138,913	-100,404	-84,978	-229,324
Cash Provided By Financing Activities				
Money borrowed	563,791	722,759	353,974	823,883
Principal payments	-533,955	-682,869	-333,235	-854,648
Personal income	32,111	28,151	35,456	44,025
Family living/owner withdrawals	-69,543	-60,460	-66,836	-104,962
Income and social security tax	-13,724	-5,223	-12,659	-30,911
Capital contributions	699	-	2,002	-
Capital distributions	-452	-	-	-731
Dividends paid	-	-	-	-
Cash gifts and inheritances	1,685	3,391	296	3,023
Gifts given	-526	-142	-	-143
Other cash flows	-	-	-	-
Cash provided by financing	-19,914	5,607	-21,002	-120,465
Net change in cash balance	-631	5,822	16,718	-4,984
Ending cash (farm & nonfarm)	84,351	46,227	34,358	222,403
Discrepancy	7	-302	83	125

Financial Standards Measures
North Dakota Farm Business Management Education Program
Region 2 - North 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	136	27	27	28
Liquidity				
Current ratio	1.90	1.12	1.67	2.49
Working capital	290,636	45,278	148,592	835,700
Working capital to gross inc	40.8 %	8.4 %	31.0 %	60.1 %
Solvency (cost)				
Farm debt to asset ratio	38 %	60 %	37 %	27 %
Farm equity to asset ratio	62 %	40 %	63 %	73 %
Farm debt to equity ratio	0.62	1.53	0.58	0.37
Profitability (cost)				
Rate of return on farm assets	4.5 %	-3.0 %	3.8 %	7.5 %
Rate of return on farm equity	4.8 %	-12.7 %	3.4 %	9.1 %
Operating profit margin	12.8 %	-9.3 %	11.1 %	21.3 %
Net farm income	113,652	-44,574	72,000	349,208
EBITDA	207,274	48,198	138,510	510,202
Repayment Capacity				
Capital debt repayment capacity	139,152	-91	81,455	391,160
Capital debt repayment margin	56,263	-98,684	25,649	259,499
Replacement margin	27,961	-113,419	4,779	196,996
Term debt coverage ratio	1.68	0.00	1.46	2.97
Replacement coverage ratio	1.25	0.00	1.06	2.01
Efficiency				
Asset turnover rate (cost)	35.2 %	32.2 %	34.2 %	35.4 %
Operating expense ratio	70.9 %	91.1 %	71.1 %	63.3 %
Depreciation expense ratio	8.9 %	9.8 %	9.1 %	8.9 %
Interest expense ratio	4.3 %	6.8 %	4.7 %	2.9 %
Net farm income ratio	15.9 %	-8.2 %	15.0 %	25.1 %

Crop Production and Marketing Summary
North Dakota Farm Business Management Education Program
Region 2 - North 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	136	27	27	28
Acreage Summary				
Total acres owned	786	807	639	1,062
Total crop acres	2,132	1,752	1,466	3,833
Crop acres owned	521	380	459	817
Crop acres cash rented	1,438	1,209	952	2,664
Crop acres share rented	172	163	55	351
Total pasture acres	323	559	489	21
Percent crop acres owned	24 %	22 %	31 %	21 %
Mach invest/crop acre cost	308	306	314	341
Average Price Received (Cash Sales Only)				
Soybeans per bushel	8.98	9.16	8.95	8.97
Wheat, Spring per bushel	5.27	5.27	5.35	5.18
Canola per cwt	17.12	17.15	16.53	17.21
Barley per bushel	4.33	3.62	4.71	4.40
Corn per bushel	2.72	2.78	2.72	2.68
Sunflowers per cwt	17.15	-	-	16.84
Beans, Pinto per cwt	26.56	-	-	26.77
Wheat, Durum per bushel	5.36	-	-	5.73
Flax per bushel	9.07	-	-	-
Average Yield Per Acre				
Soybeans (bushel)	31.77	27.91	28.11	34.16
Wheat, Spring (bushel)	52.79	41.91	48.84	57.47
Canola (cwt)	18.79	15.05	17.83	20.54
Corn (bushel)	111.01	94.51	97.84	122.79
Pasture (aum)	1.03	1.10	0.938	-
Barley (bushel)	80.50	65.25	58.82	93.07
Beans, Pinto (cwt)	20.04	-	-	21.04
Hay, Grass (ton)	1.64	1.60	-	-
Peas, Field (bushel)	39.90	30.26	-	45.94
Sunflowers (cwt)	18.14	-	-	17.48
Hay, Alfalfa (ton)	1.42	0.911	-	-
Hay, Small Grain (ton)	1.66	-	1.50	-
Wheat, Durum (bushel)	40.15	47.77	-	-
Hay, Summer Annual Grass (ton)	2.01	2.79	-	-
Flax (bushel)	17.82	-	-	22.88
Hay, Mixed (ton)	0.968	-	0.770	-
Corn Silage (ton)	15.27	17.02	-	-

Household and Personal Expenses
North Dakota Farm Business Management Education Program
Region 2 - North 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	69	10	13	13
Average family size	2.9	2.7	2.8	2.8
Family Living Expenses				
Food and meals expense	8,204	10,255	7,531	7,049
Medical care	4,625	4,484	5,321	7,502
Health insurance	10,481	9,938	11,172	16,438
Cash donations	2,330	1,350	2,278	5,324
Household supplies	7,705	7,046	8,560	10,366
Clothing	2,442	2,808	2,288	3,360
Personal care	5,475	2,145	4,407	8,681
Child / Dependent care	849	1,176	726	-
Alimony and child support	620	3,601	-	-
Gifts	1,890	2,510	819	2,714
Education	1,257	742	346	3,756
Recreation	5,297	5,307	4,675	8,424
Utilities (household share)	4,267	4,260	4,538	5,022
Personal vehicle operating exp	3,383	3,800	2,801	2,621
Household real estate taxes	440	195	511	863
Dwelling rent	113	120	92	-
Household repairs	1,732	1,956	1,948	357
Personal interest	1,427	877	3,277	941
Disability / Long term care ins	458	929	139	578
Life insurance payments	3,580	2,769	5,460	6,458
Personal property insurance	350	167	341	303
Miscellaneous	6,584	4,352	6,539	13,827
Total cash family living expense	73,507	70,787	73,771	104,586
Family living from the farm	-	-	-	-
Total family living	73,507	70,787	73,771	104,586
Other Nonfarm Expenditures				
Income taxes	14,442	5,245	14,188	30,331
Furnishing & appliance purchases	58	400	-	-
Nonfarm vehicle purchases	6,230	9,940	1,162	10,116
Nonfarm real estate purchases	1,353	-1,100	-	-
Other nonfarm capital purchases	152	580	-	-
Nonfarm savings & investments	5,781	-301	4,494	17,319
Total other nonfarm expenditures	28,016	14,764	19,843	57,767
Total cash family living investment & nonfarm capital purch	101,523	85,551	93,614	162,352

Operator and Labor Information
North Dakota Farm Business Management Education Program
Region 2 - North 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	136	27	27	28
Operator Information				
Average number of operators	1.1	1.1	1.1	1.2
Average age of operators	44.8	45.4	49.0	48.3
Average number of years farming	20.8	21.6	26.9	25.7
Results Per Operator				
Working capital	270,729	42,155	138,345	709,079
Total assets (cost)	2,180,525	1,734,841	1,536,273	3,873,348
Total liabilities	783,280	966,744	559,045	985,096
Net worth (cost)	1,397,245	768,097	977,228	2,888,252
Gross farm income	664,336	503,401	446,432	1,180,524
Total farm expense	558,987	542,269	379,199	886,733
Net farm income from operations	105,349	-38,868	67,233	293,791
Net nonfarm income	29,912	26,209	33,010	37,354
Family living & tax withdrawals	80,890	60,854	75,038	123,706
Total acres owned	732.1	751.2	595.2	900.9
Total crop acres	1,986.1	1,631.3	1,364.9	3,252.0
Crop acres owned	485.7	354.1	427.3	693.6
Crop acres cash rented	1,339.9	1,125.6	886.8	2,260.2
Crop acres share rented	160.6	151.6	50.8	298.2
Total pasture acres	300.4	520.2	455.3	18.2
Labor Analysis				
Number of farms	136	27	27	28
Total unpaid labor hours	2,183	2,224	2,181	2,593
Total hired labor hours	790	830	504	1,644
Total labor hours per farm	2,973	3,054	2,685	4,236
Unpaid hours per operator	2,034	2,071	2,031	2,200

Nonfarm Summary
North Dakota Farm Business Management Education Program
Region 2 - North 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	136	27	27	28
Nonfarm Income				
Personal wages & salary	19,334	15,754	27,960	16,842
Net nonfarm business income	3,732	2,572	62	12,124
Personal rental income	1,855	1,983	1,215	5,615
Personal interest income	471	19	52	1,883
Personal cash dividends	1,063	-	24	4,782
Tax refunds	1,109	3,094	265	190
Other nonfarm income	4,547	4,728	5,877	2,589
Total nonfarm income	32,111	28,151	35,456	44,025
Gifts and inheritances	1,685	3,391	296	3,023

Financial Summary
North Dakota Farm Business Management Education Program
Region 2 - North Central North Dakota, 2017
(Farms Sorted By Gross Farm Income)

	<u>Avg. Of All Farms</u>	<u>Less than 100,000</u>	<u>100,001 - 250,000</u>	<u>250,001 - 500,000</u>	<u>500,001 - 1,000,000</u>	<u>1,000,001- 2,000,000</u>
Number of farms	136	8	22	26	50	26
Income Statement						
Gross cash farm income	699,597	40,760	177,920	388,792	711,399	1,345,734
Total cash farm expense	540,231	38,676	139,071	308,403	557,185	1,028,905
Net cash farm income	159,366	2,083	38,849	80,389	154,213	316,829
Inventory change	17,236	11,371	18,924	-4,840	21,276	64,756
Depreciation	-63,506	-990	-16,294	-35,422	-65,131	-124,029
Net farm income from operations	113,095	12,464	41,478	40,127	110,358	257,556
Gain or loss on capital sales	557	-	-1,763	-399	523	3,241
Average net farm income	113,652	12,464	39,715	39,728	110,882	260,797
Median net farm income	71,821	17,892	44,578	24,282	99,724	286,296
Profitability (cost)						
Rate of return on assets	4.5 %	3.1 %	4.3 %	2.1 %	4.0 %	6.2 %
Rate of return on equity	4.8 %	4.3 %	4.6 %	0.4 %	4.0 %	7.3 %
Operating profit margin	12.8 %	8.7 %	14.9 %	5.7 %	12.0 %	16.1 %
Asset turnover rate	35.2 %	36.0 %	29.0 %	36.8 %	33.1 %	38.6 %
Liquidity & Repayment (end of year)						
Current assets	613,197	51,156	146,203	297,398	652,616	1,190,643
Current liabilities	322,561	24,701	73,776	176,903	330,064	609,376
Current ratio	1.90	2.07	1.98	1.68	1.98	1.95
Working capital	290,636	26,455	72,428	120,495	322,552	581,267
Change in working capital	13,523	10,534	20,745	-7,223	11,528	47,783
Working capital to gross inc	40.8 %	49.5 %	36.0 %	30.3 %	44.0 %	41.6 %
Term debt coverage ratio	1.68	1.71	1.44	1.12	1.45	2.39
Replacement coverage ratio	1.25	1.68	1.27	0.87	1.08	1.64
Term debt to EBITDA	2.09	2.94	3.05	2.98	2.22	1.56
Solvency (end of year at cost)						
Number of farms	136	8	22	26	50	26
Total assets	2,340,858	185,163	793,682	1,254,883	2,527,573	4,291,231
Total liabilities	840,875	94,284	365,426	545,553	893,182	1,392,819
Net worth	1,499,983	90,879	428,255	709,330	1,634,390	2,898,412
Net worth change	67,177	18,783	23,584	14,159	54,448	192,793
Farm debt to asset ratio	38 %	50 %	48 %	47 %	37 %	35 %
Total debt to asset ratio	36 %	51 %	46 %	43 %	35 %	32 %
Change in earned net worth %	5 %	26 %	6 %	2 %	3 %	7 %
Nonfarm Information						
Net nonfarm income	32,111	30,688	34,189	27,971	30,064	43,058
Farms reporting living expenses	69	2	10	15	29	10
Total family living expense	73,507	-	49,377	56,892	75,703	104,807
Crop Acres						
Total crop acres	2,132	291	672	1,297	2,315	3,722
Total crop acres owned	521	-	209	350	713	605
Total crop acres cash rented	1,438	245	356	867	1,406	2,898
Total crop acres share rented	172	47	108	81	196	219
Machinery value per crop acre	308	32	242	254	303	337

Financial Summary
North Dakota Farm Business Management Education Program
Region 2 - North 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	136	23	32	26	33	22
Income Statement						
Gross cash farm income	699,597	299,946	758,983	819,684	687,984	906,531
Total cash farm expense	540,231	242,906	590,467	647,755	526,685	671,246
Net cash farm income	159,366	57,040	168,517	171,929	161,299	235,285
Inventory change	17,236	21,514	11,834	22,357	19,829	10,678
Depreciation	-63,506	-12,270	-57,371	-81,720	-61,492	-107,492
Net farm income from operations	113,095	66,284	122,980	112,565	119,636	138,471
Gain or loss on capital sales	557	-1,103	1,127	5,468	-1,404	-1,400
Average net farm income	113,652	65,181	124,107	118,032	118,231	137,071
Median net farm income	71,821	26,634	77,087	74,950	71,737	106,233
Profitability (cost)						
Rate of return on assets	4.5 %	10.4 %	5.8 %	3.9 %	4.4 %	3.3 %
Rate of return on equity	4.8 %	19.7 %	7.4 %	3.8 %	4.7 %	3.1 %
Operating profit margin	12.8 %	14.1 %	13.7 %	11.7 %	13.6 %	11.7 %
Asset turnover rate	35.2 %	73.6 %	42.6 %	33.6 %	32.5 %	27.8 %
Liquidity & Repayment (end of year)						
Current assets	613,197	172,447	526,704	709,923	678,647	987,297
Current liabilities	322,561	111,448	308,431	406,922	326,363	458,419
Current ratio	1.90	1.55	1.71	1.74	2.08	2.15
Working capital	290,636	60,999	218,273	303,002	352,284	528,878
Change in working capital	13,523	1,867	7,758	19,627	11,650	29,692
Working capital to gross inc	40.8 %	19.0 %	28.5 %	35.7 %	50.6 %	58.0 %
Term debt coverage ratio	1.68	1.83	1.85	1.62	1.58	1.64
Replacement coverage ratio	1.25	1.78	1.41	1.26	1.15	1.11
Term debt to EBITDA	2.09	1.41	2.52	2.70	1.84	1.46
Solvency (end of year at cost)						
Number of farms	136	23	32	26	33	22
Total assets	2,340,858	549,870	2,051,269	3,026,857	2,431,330	3,688,039
Total liabilities	840,875	346,303	979,410	1,176,664	774,248	859,519
Net worth	1,499,983	203,567	1,071,859	1,850,193	1,657,082	2,828,520
Net worth change	67,177	35,107	79,875	83,944	60,004	73,178
Farm debt to asset ratio	38 %	61 %	49 %	43 %	35 %	25 %
Total debt to asset ratio	36 %	63 %	48 %	39 %	32 %	23 %
Change in earned net worth %	5 %	21 %	8 %	5 %	4 %	3 %
Nonfarm Information						
Net nonfarm income	32,111	22,134	27,531	41,309	30,709	40,439
Farms reporting living expenses	69	9	16	9	18	17
Total family living expense	73,507	57,562	72,284	72,955	76,978	79,716
Crop Acres						
Total crop acres	2,132	999	2,211	2,468	2,152	2,774
Total crop acres owned	521	50	348	523	698	999
Total crop acres cash rented	1,438	868	1,630	1,795	1,322	1,510
Total crop acres share rented	172	82	232	149	133	265
Machinery value per crop acre	308	134	268	310	326	397

Financial Summary
North Dakota Farm Business Management Education Program
Region 2 - North 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	136	97	12	19	8
Income Statement					
Gross cash farm income	699,597	821,970	110,800	538,642	481,283
Total cash farm expense	540,231	624,591	82,262	431,195	463,288
Net cash farm income	159,366	197,379	28,538	107,448	17,996
Inventory change	17,236	25,479	13,930	-39,951	58,061
Depreciation	-63,506	-73,473	-10,600	-49,028	-56,401
Net farm income from operations	113,095	149,385	31,867	18,468	19,656
Gain or loss on capital sales	557	1,260	-4,194	-2,717	6,935
Average net farm income	113,652	150,645	27,673	15,751	26,591
Median net farm income	71,821	117,411	24,899	25,546	32,773
Profitability (cost)					
Rate of return on assets	4.5 %	5.3 %	3.5 %	0.7 %	1.2 %
Rate of return on equity	4.8 %	6.1 %	3.2 %	-2.4 %	-5.2 %
Operating profit margin	12.8 %	14.3 %	22.1 %	2.8 %	2.7 %
Asset turnover rate	35.2 %	37.1 %	15.8 %	25.3 %	44.9 %
Liquidity & Repayment (end of year)					
Current assets	613,197	743,662	116,334	374,754	342,899
Current liabilities	322,561	367,293	47,022	294,718	259,615
Current ratio	1.90	2.02	2.47	1.27	1.32
Working capital	290,636	376,369	69,312	80,036	83,284
Change in working capital	13,523	15,291	20,094	4,202	4,367
Working capital to gross inc	40.8 %	44.8 %	55.4 %	15.7 %	15.8 %
Term debt coverage ratio	1.68	1.94	1.17	0.65	1.01
Replacement coverage ratio	1.25	1.40	1.04	0.57	0.69
Term debt to EBITDA	2.09	1.71	4.20	4.93	4.59
Solvency (end of year at cost)					
Number of farms	136	97	12	19	8
Total assets	2,340,858	2,676,981	748,001	2,014,050	1,430,817
Total liabilities	840,875	891,165	277,280	921,569	884,847
Net worth	1,499,983	1,785,816	470,721	1,092,481	545,970
Net worth change	67,177	94,079	22,790	-11,192	-6,301
Farm debt to asset ratio	38 %	36 %	39 %	47 %	66 %
Total debt to asset ratio	36 %	33 %	37 %	46 %	62 %
Change in earned net worth %	5 %	6 %	5 %	-1 %	-1 %
Nonfarm Information					
Net nonfarm income	32,111	33,200	32,421	27,460	29,500
Farms reporting living expenses	69	52	5	9	3
Total family living expense	73,507	78,575	40,420	51,764	-
Crop Acres					
Total crop acres	2,132	2,461	459	1,765	1,525
Total crop acres owned	521	550	169	638	421
Total crop acres cash rented	1,438	1,700	258	1,005	1,067
Total crop acres share rented	172	211	31	122	37
Machinery value per crop acre	308	316	225	272	290

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 2 - North Central North Dakota, 2017
(Farms Sorted By Net Return)

Barley on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	9
Acres	89.74
Yield per acre (bu.)	82.04
Operators share of yield %	100.00
Value per bu.	4.30
Total product return per acre	352.79
Crop insurance per acre	9.57
Other crop income per acre	0.54
Gross return per acre	362.90
Direct Expenses	
Seed and plants	14.78
Fertilizer	44.82
Crop chemicals	26.53
Crop insurance	10.41
Fuel & oil	13.95
Repairs	21.58
Custom hire	2.01
Operating interest	2.99
Miscellaneous	0.53
Total direct expenses per acre	137.62
Return over direct exp per acre	225.29
Overhead Expenses	
Hired labor	13.70
Building leases	0.58
RE & pers. property taxes	10.55
Farm insurance	4.56
Utilities	3.84
Dues & professional fees	0.50
Interest	20.35
Mach & bldg depreciation	34.69
Miscellaneous	3.67
Total overhead expenses per acre	92.44
Total dir & ovhd expenses per acre	230.05
Net return per acre	132.85
Government payments	16.77
Net return with govt pmts	149.62
Labor & management charge	22.44
Net return over lbr & mgt	127.18
Cost of Production	
Total direct expense per bu.	1.68
Total dir & ovhd exp per bu.	2.80
Less govt & other income	2.48
With labor & management	2.75
Net value per unit	4.30
Machinery cost per acre	73.19
Est. labor hours per acre	1.29

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 2 - North Central North Dakota, 2017
(Farms Sorted By Net Return)

Barley on Cash Rent

	Avg. Of All Farms
Number of farms	23
Acres	303.58
Yield per acre (bu.)	78.89
Operators share of yield %	100.00
Value per bu.	4.30
Total product return per acre	339.47
Crop insurance per acre	12.97
Other crop income per acre	6.98
Gross return per acre	359.43
Direct Expenses	
Seed and plants	15.29
Fertilizer	47.46
Crop chemicals	33.94
Crop insurance	14.55
Fuel & oil	12.57
Repairs	25.84
Custom hire	2.74
Land rent	49.16
Machinery leases	1.44
Operating interest	4.35
Miscellaneous	1.28
Total direct expenses per acre	208.62
Return over direct exp per acre	150.80
Overhead Expenses	
Custom hire	2.82
Hired labor	9.06
Machinery leases	1.97
Building leases	0.62
Farm insurance	4.17
Utilities	3.12
Dues & professional fees	0.73
Interest	3.48
Mach & bldg depreciation	29.07
Miscellaneous	3.12
Total overhead expenses per acre	58.16
Total dir & ovhd expenses per acre	266.78
Net return per acre	92.64
Government payments	14.85
Net return with govt pmts	107.49
Labor & management charge	24.09
Net return over lbr & mgt	83.40
Cost of Production	
Total direct expense per bu.	2.64
Total dir & ovhd exp per bu.	3.38
Less govt & other income	2.94
With labor & management	3.25
Net value per unit	4.30
Machinery cost per acre	77.83
Est. labor hours per acre	1.22

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 2 - North Central North Dakota, 2017
(Farms Sorted By Net Return)

Beans, Pinto on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	7
Acres	141.66
Yield per acre (cwt.)	19.00
Operators share of yield %	100.00
Value per cwt.	23.10
Total product return per acre	438.84
Crop insurance per acre	0.24
Other crop income per acre	3.35
Gross return per acre	442.43
Direct Expenses	
Seed and plants	46.37
Fertilizer	40.58
Crop chemicals	59.36
Crop insurance	24.26
Fuel & oil	14.52
Repairs	30.79
Custom hire	3.91
Operating interest	5.33
Miscellaneous	2.93
Total direct expenses per acre	228.04
Return over direct exp per acre	214.39
Overhead Expenses	
Custom hire	0.39
Hired labor	16.87
Machinery leases	6.84
Building leases	0.65
RE & pers. property taxes	8.92
Farm insurance	7.57
Utilities	4.61
Dues & professional fees	0.88
Interest	20.94
Mach & bldg depreciation	46.83
Miscellaneous	4.45
Total overhead expenses per acre	118.95
Total dir & ovhd expenses per acre	346.99
Net return per acre	95.44
Government payments	18.47
Net return with govt pmts	113.91
Labor & management charge	35.06
Net return over lbr & mgt	78.85
Cost of Production	
Total direct expense per cwt.	12.00
Total dir & ovhd exp per cwt.	18.26
Less govt & other income	17.10
With labor & management	18.95
Net value per unit	23.10
Machinery cost per acre	101.30
Est. labor hours per acre	1.75

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 2 - North Central North Dakota, 2017
(Farms Sorted By Net Return)

Beans, Pinto on Cash Rent

	<u>Avg. Of All Farms</u>
Number of farms	9
Acres	288.82
Yield per acre (cwt.)	21.52
Operators share of yield %	100.00
Value per cwt.	22.87
Total product return per acre	492.31
Crop insurance per acre	0.15
Other crop income per acre	6.24
Gross return per acre	498.69
Direct Expenses	
Seed and plants	53.89
Fertilizer	41.41
Crop chemicals	62.02
Crop insurance	25.55
Fuel & oil	13.88
Repairs	27.29
Custom hire	2.88
Land rent	50.48
Operating interest	5.33
Miscellaneous	1.51
Total direct expenses per acre	284.24
Return over direct exp per acre	214.45
Overhead Expenses	
Custom hire	1.17
Hired labor	5.39
Machinery leases	8.68
Building leases	0.45
Farm insurance	5.19
Utilities	3.08
Dues & professional fees	0.49
Interest	3.87
Mach & bldg depreciation	43.47
Miscellaneous	3.65
Total overhead expenses per acre	75.44
Total dir & ovhd expenses per acre	359.69
Net return per acre	139.01
Government payments	13.40
Net return with govt pmts	152.40
Labor & management charge	34.72
Net return over lbr & mgt	117.68
Cost of Production	
Total direct expense per cwt.	13.21
Total dir & ovhd exp per cwt.	16.71
Less govt & other income	15.79
With labor & management	17.41
Net value per unit	22.87
Machinery cost per acre	97.58
Est. labor hours per acre	1.25

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 2 - North Central North Dakota, 2017
(Farms Sorted By Net Return)

Canola on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	20
Acres	196.42
Yield per acre (cwt.)	21.73
Operators share of yield %	100.00
Value per cwt.	16.95
Total product return per acre	368.33
Crop insurance per acre	1.51
Other crop income per acre	3.09
Gross return per acre	372.94
Direct Expenses	
Seed and plants	54.74
Fertilizer	59.32
Crop chemicals	25.67
Crop insurance	14.79
Fuel & oil	12.72
Repairs	22.75
Custom hire	2.97
Operating interest	3.91
Miscellaneous	0.46
Total direct expenses per acre	197.32
Return over direct exp per acre	175.62
Overhead Expenses	
Custom hire	3.82
Hired labor	6.27
Machinery leases	0.85
Building leases	0.30
RE & pers. property taxes	7.47
Farm insurance	4.38
Utilities	3.28
Dues & professional fees	0.30
Interest	25.81
Mach & bldg depreciation	31.17
Miscellaneous	2.98
Total overhead expenses per acre	86.62
Total dir & ovhd expenses per acre	283.94
Net return per acre	89.00
Government payments	23.75
Net return with govt pmts	112.75
Labor & management charge	26.69
Net return over lbr & mgt	86.06
Cost of Production	
Total direct expense per cwt.	9.08
Total dir & ovhd exp per cwt.	13.06
Less govt & other income	11.76
With labor & management	12.99
Net value per unit	16.95
Machinery cost per acre	74.19
Est. labor hours per acre	1.22

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 2 - North Central North Dakota, 2017
(Farms Sorted By Net Return)

Canola on Cash Rent

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	44	8	9	9
Acres	405.49	290.71	540.52	270.70
Yield per acre (cwt.)	18.21	12.56	19.14	21.67
Operators share of yield %	100.00	100.00	100.00	100.00
Value per cwt.	17.06	16.76	16.96	17.38
Total product return per acre	310.70	210.50	324.45	376.68
Crop insurance per acre	10.06	27.51	9.58	0.26
Other crop income per acre	4.80	2.99	4.86	7.04
Gross return per acre	325.56	241.00	338.89	383.97
Direct Expenses				
Seed and plants	56.47	64.12	61.90	46.57
Fertilizer	57.43	56.51	63.15	60.09
Crop chemicals	29.51	30.32	35.30	20.31
Crop insurance	15.70	14.16	14.82	15.62
Fuel & oil	12.13	11.48	12.33	11.42
Repairs	22.18	24.33	18.90	17.93
Custom hire	2.73	9.29	1.95	2.85
Land rent	50.66	49.10	51.03	45.16
Operating interest	4.75	4.43	4.80	4.16
Miscellaneous	0.56	0.44	0.52	0.12
Total direct expenses per acre	252.12	264.18	264.68	224.24
Return over direct exp per acre	73.44	-23.18	74.21	159.73
Overhead Expenses				
Custom hire	3.24	3.13	1.94	5.57
Hired labor	6.67	2.84	9.37	2.81
Machinery leases	4.31	3.39	4.28	1.05
Building leases	1.00	0.01	0.55	-
Farm insurance	3.90	3.81	4.17	3.87
Utilities	2.33	1.91	2.04	2.53
Dues & professional fees	0.52	0.66	0.17	0.56
Interest	2.71	3.08	2.00	2.98
Mach & bldg depreciation	24.43	21.51	29.03	27.51
Miscellaneous	2.92	1.88	2.26	4.00
Total overhead expenses per acre	52.02	42.25	55.81	50.88
Total dir & ovhd expenses per acre	304.14	306.43	320.49	275.12
Net return per acre	21.42	-65.43	18.39	108.85
Government payments	18.67	22.21	20.85	16.23
Net return with govt pmts	40.09	-43.22	39.25	125.08
Labor & management charge	24.95	26.56	23.97	28.76
Net return over lbr & mgt	15.14	-69.78	15.28	96.32
Cost of Production				
Total direct expense per cwt.	13.85	21.04	13.83	10.35
Total dir & ovhd exp per cwt.	16.70	24.40	16.75	12.69
Less govt & other income	14.86	20.20	14.90	11.61
With labor & management	16.23	22.32	16.16	12.94
Net value per unit	17.06	16.76	16.96	17.38
Machinery cost per acre	69.60	75.89	66.98	68.16
Est. labor hours per acre	1.26	1.38	1.21	1.19

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 2 - North Central North Dakota, 2017
(Farms Sorted By Net Return)

Corn on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	15
Acres	161.51
Yield per acre (bu.)	123.01
Operators share of yield %	100.00
Value per bu.	2.81
Total product return per acre	346.03
Crop insurance per acre	3.72
Other crop income per acre	4.16
Gross return per acre	353.91
Direct Expenses	
Seed and plants	82.18
Fertilizer	78.75
Crop chemicals	25.05
Crop insurance	16.49
Fuel & oil	22.61
Repairs	36.45
Custom hire	2.71
Operating interest	5.42
Miscellaneous	1.77
Total direct expenses per acre	271.43
Return over direct exp per acre	82.48
Overhead Expenses	
Custom hire	2.08
Hired labor	25.01
Machinery leases	4.43
Building leases	0.77
RE & pers. property taxes	9.16
Farm insurance	7.33
Utilities	5.34
Dues & professional fees	1.18
Interest	19.06
Mach & bldg depreciation	61.85
Miscellaneous	5.09
Total overhead expenses per acre	141.30
Total dir & ovhd expenses per acre	412.73
Net return per acre	-58.82
Government payments	19.79
Net return with govt pmts	-39.03
Labor & management charge	38.35
Net return over lbr & mgt	-77.38
Cost of Production	
Total direct expense per bu.	2.21
Total dir & ovhd exp per bu.	3.36
Less govt & other income	3.13
With labor & management	3.44
Net value per unit	2.81
Machinery cost per acre	127.51
Est. labor hours per acre	2.21

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 2 - North Central North Dakota, 2017
(Farms Sorted By Net Return)

Corn on Cash Rent

	<u>Avg. Of</u> <u>All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	31	6	6	7
Acres	229.61	213.89	234.63	261.16
Yield per acre (bu.)	104.87	92.58	96.40	112.82
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	2.87	2.68	2.82	2.99
Other product return per acre	0.65	-	-	2.52
Total product return per acre	301.21	248.09	271.53	339.94
Crop insurance per acre	32.60	0.18	59.91	51.36
Other crop income per acre	7.47	0.89	11.89	13.99
Gross return per acre	341.29	249.15	343.34	405.29
Direct Expenses				
Seed and plants	82.07	87.58	84.50	80.26
Fertilizer	71.81	67.99	60.84	68.96
Crop chemicals	26.65	32.76	30.72	21.37
Crop insurance	16.69	16.32	17.32	14.89
Drying expense	1.77	-	-	4.82
Fuel & oil	19.01	21.97	21.65	15.92
Repairs	41.29	36.75	58.60	38.82
Custom hire	3.29	6.56	3.26	3.13
Land rent	55.92	53.97	51.98	57.02
Operating interest	8.45	9.94	8.25	5.60
Miscellaneous	1.29	1.38	1.14	1.71
Total direct expenses per acre	328.23	335.22	338.26	312.51
Return over direct exp per acre	13.05	-86.06	5.08	92.78
Overhead Expenses				
Custom hire	5.48	1.09	6.43	9.14
Hired labor	11.27	3.84	6.87	8.68
Machinery leases	6.11	18.49	4.50	3.23
Building leases	0.57	0.08	-	0.18
Farm insurance	5.44	5.78	4.78	6.19
Utilities	3.93	4.74	5.03	3.98
Dues & professional fees	1.27	1.17	1.93	0.84
Interest	4.40	4.48	5.82	3.68
Mach & bldg depreciation	42.85	47.26	38.79	42.34
Miscellaneous	4.77	3.06	10.96	3.75
Total overhead expenses per acre	86.09	89.99	85.10	82.02
Total dir & ovhd expenses per acre	414.32	425.20	423.36	394.53
Net return per acre	-73.04	-176.05	-80.03	10.77
Government payments	15.23	20.26	14.18	17.27
Net return with govt pmts	-57.81	-155.79	-65.85	28.03
Labor & management charge	36.52	39.28	40.20	33.33
Net return over lbr & mgt	-94.32	-195.07	-106.05	-5.30
Cost of Production				
Total direct expense per bu.	3.13	3.62	3.51	2.77
Total dir & ovhd exp per bu.	3.95	4.59	4.39	3.50
Less govt & other income	3.42	4.36	3.50	2.74
With labor & management	3.77	4.79	3.92	3.04
Net value per unit	2.87	2.68	2.82	2.99
Machinery cost per acre	120.29	135.92	136.71	113.66
Est. labor hours per acre	1.88	1.62	1.73	1.83

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 2 - North Central North Dakota, 2017
(Farms Sorted By Net Return)

CRP on Owned Land

	<u>Avg. Of</u> <u>All Farms</u>
Number of farms	20
Acres	97.53
Yield per acre (\$)	42.28
Operators share of yield %	100.00
Value per \$	1.00
Total product return per acre	42.28
Gross return per acre	42.27
Direct Expenses	
Crop chemicals	3.51
Fuel & oil	0.42
Repairs	0.92
Miscellaneous	0.10
Total direct expenses per acre	4.94
Return over direct exp per acre	37.33
Overhead Expenses	
Hired labor	0.37
RE & pers. property taxes	10.62
Interest	7.67
Mach & bldg depreciation	1.01
Miscellaneous	0.60
Total overhead expenses per acre	20.28
Total dir & ovhd expenses per acre	25.22
Net return per acre	17.05

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 2 - North Central North Dakota, 2017
(Farms Sorted By Net Return)

Flax on Cash Rent

	<u>Avg. Of All Farms</u>
Number of farms	5
Acres	184.76
Yield per acre (bu.)	17.74
Operators share of yield %	100.00
Value per bu.	9.01
Total product return per acre	159.84
Crop insurance per acre	18.47
Other crop income per acre	3.88
Gross return per acre	182.19
Direct Expenses	
Seed and plants	13.51
Fertilizer	31.20
Crop chemicals	26.88
Crop insurance	8.86
Fuel & oil	9.29
Repairs	17.41
Custom hire	1.98
Land rent	45.76
Operating interest	2.45
Miscellaneous	0.06
Total direct expenses per acre	157.40
Return over direct exp per acre	24.79
Overhead Expenses	
Hired labor	3.41
Farm insurance	4.16
Utilities	2.67
Dues & professional fees	0.68
Interest	1.45
Mach & bldg depreciation	18.87
Miscellaneous	2.48
Total overhead expenses per acre	33.71
Total dir & ovhd expenses per acre	191.11
Net return per acre	-8.92
Government payments	10.56
Net return with govt pmts	1.64
Labor & management charge	21.25
Net return over lbr & mgt	-19.61
Cost of Production	
Total direct expense per bu.	8.87
Total dir & ovhd exp per bu.	10.77
Less govt & other income	8.92
With labor & management	10.11
Net value per unit	9.01
Machinery cost per acre	46.98
Est. labor hours per acre	1.14

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 2 - North Central North Dakota, 2017
(Farms Sorted By Net Return)

Hay, Alfalfa on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	5
Acres	141.94
Yield per acre (ton)	1.34
Operators share of yield %	100.00
Value per ton	62.40
Total product return per acre	83.69
Other crop income per acre	5.64
Gross return per acre	89.32
Direct Expenses	
Seed and plants	0.58
Fertilizer	1.32
Crop chemicals	0.42
Fuel & oil	9.07
Repairs	12.96
Custom hire	0.25
Operating interest	2.00
Miscellaneous	1.45
Total direct expenses per acre	28.04
Return over direct exp per acre	61.28
Overhead Expenses	
Custom hire	3.34
Hired labor	6.19
RE & pers. property taxes	6.22
Farm insurance	4.22
Utilities	2.95
Dues & professional fees	0.34
Interest	15.76
Mach & bldg depreciation	21.06
Miscellaneous	0.61
Total overhead expenses per acre	60.69
Total dir & ovhd expenses per acre	88.73
Net return per acre	0.59
Government payments	5.82
Net return with govt pmts	6.41
Labor & management charge	15.20
Net return over lbr & mgt	-8.79
Cost of Production	
Total direct expense per ton	20.91
Total dir & ovhd exp per ton	66.15
Less govt & other income	57.62
With labor & management	68.95
Net value per unit	62.40
Machinery cost per acre	49.49
Est. labor hours per acre	1.10

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 2 - North Central North Dakota, 2017
(Farms Sorted By Net Return)

Hay, Grass on Owned Land

	Avg. Of All Farms
Number of farms	8
Acres	154.00
Yield per acre (ton)	1.69
Operators share of yield %	100.00
Value per ton	41.59
Total product return per acre	70.28
Other crop income per acre	0.34
Gross return per acre	70.62
Direct Expenses	
Fuel & oil	5.54
Repairs	12.64
Operating interest	1.37
Miscellaneous	0.78
Total direct expenses per acre	20.33
Return over direct exp per acre	50.29
Overhead Expenses	
Custom hire	0.59
Hired labor	2.56
Machinery leases	1.24
RE & pers. property taxes	3.62
Farm insurance	1.23
Utilities	1.21
Interest	6.80
Mach & bldg depreciation	10.10
Miscellaneous	0.66
Total overhead expenses per acre	28.01
Total dir & ovhd expenses per acre	48.34
Net return per acre	22.29
Government payments	0.85
Net return with govt pmts	23.14
Labor & management charge	11.76
Net return over lbr & mgt	11.38
Cost of Production	
Total direct expense per ton	12.03
Total dir & ovhd exp per ton	28.61
Less govt & other income	27.90
With labor & management	34.86
Net value per unit	41.59
Machinery cost per acre	30.70
Est. labor hours per acre	1.11

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 2 - North Central North Dakota, 2017
(Farms Sorted By Net Return)

Hay, Grass on Cash Rent

	Avg. Of All Farms
Number of farms	10
Acres	206.47
Yield per acre (ton)	1.06
Operators share of yield %	100.00
Value per ton	34.84
Total product return per acre	36.92
Other crop income per acre	2.01
Gross return per acre	38.93
Direct Expenses	
Fuel & oil	6.76
Repairs	15.98
Land rent	15.57
Operating interest	1.82
Miscellaneous	1.16
Total direct expenses per acre	41.29
Return over direct exp per acre	-2.36
Overhead Expenses	
Custom hire	0.42
Hired labor	4.02
Machinery leases	0.89
Farm insurance	1.58
Utilities	0.86
Dues & professional fees	0.27
Interest	0.68
Mach & bldg depreciation	19.89
Miscellaneous	0.50
Total overhead expenses per acre	29.11
Total dir & ovhd expenses per acre	70.41
Net return per acre	-31.48
Government payments	1.18
Net return with govt pmts	-30.30
Labor & management charge	12.71
Net return over lbr & mgt	-43.01
Cost of Production	
Total direct expense per ton	38.96
Total dir & ovhd exp per ton	66.43
Less govt & other income	63.42
With labor & management	75.42
Net value per unit	34.84
Machinery cost per acre	44.24
Est. labor hours per acre	1.27

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 2 - North Central North Dakota, 2017
(Farms Sorted By Net Return)

Hay, Small Grain on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	5
Acres	57.12
Yield per acre (ton)	1.61
Operators share of yield %	100.00
Value per ton	48.44
Total product return per acre	77.77
Other crop income per acre	1.36
Gross return per acre	79.14
Direct Expenses	
Seed and plants	13.62
Fertilizer	17.90
Crop chemicals	2.81
Crop insurance	0.42
Fuel & oil	9.04
Repairs	13.34
Custom hire	5.73
Operating interest	1.87
Miscellaneous	1.62
Total direct expenses per acre	66.34
Return over direct exp per acre	12.80
Overhead Expenses	
Custom hire	4.01
Hired labor	9.86
Machinery leases	1.22
RE & pers. property taxes	6.07
Farm insurance	4.12
Utilities	2.32
Dues & professional fees	0.43
Interest	15.23
Mach & bldg depreciation	15.34
Miscellaneous	0.52
Total overhead expenses per acre	59.11
Total dir & ovhd expenses per acre	125.45
Net return per acre	-46.31
Government payments	8.35
Net return with govt pmts	-37.96
Labor & management charge	13.55
Net return over lbr & mgt	-51.52
Cost of Production	
Total direct expense per ton	41.32
Total dir & ovhd exp per ton	78.14
Less govt & other income	72.09
With labor & management	80.53
Net value per unit	48.44
Machinery cost per acre	51.39
Est. labor hours per acre	1.26

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 2 - North Central North Dakota, 2017
(Farms Sorted By Net Return)

Hay, Small Grain on Cash Rent

	<u>Avg. Of All Farms</u>
Number of farms	5
Acres	79.18
Yield per acre (ton)	1.96
Operators share of yield %	100.00
Value per ton	53.64
Other product return per acre	6.32
Total product return per acre	111.34
Other crop income per acre	14.70
Gross return per acre	126.04
Direct Expenses	
Seed and plants	24.40
Fertilizer	26.25
Crop chemicals	12.24
Crop insurance	0.29
Fuel & oil	5.75
Repairs	15.72
Custom hire	1.16
Land rent	31.96
Operating interest	2.19
Miscellaneous	1.32
Total direct expenses per acre	121.29
Return over direct exp per acre	4.75
Overhead Expenses	
Custom hire	2.46
Hired labor	4.82
Machinery leases	4.11
Farm insurance	3.13
Utilities	2.86
Dues & professional fees	0.72
Interest	2.68
Mach & bldg depreciation	13.05
Miscellaneous	0.80
Total overhead expenses per acre	34.64
Total dir & ovhd expenses per acre	155.93
Net return per acre	-29.88
Government payments	7.69
Net return with govt pmts	-22.19
Labor & management charge	13.65
Net return over lbr & mgt	-35.84
Cost of Production	
Total direct expense per ton	61.94
Total dir & ovhd exp per ton	79.63
Less govt & other income	64.97
With labor & management	71.94
Net value per unit	53.64
Machinery cost per acre	44.68
Est. labor hours per acre	1.16

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 2 - North Central North Dakota, 2017
(Farms Sorted By Net Return)

Pasture on Owned Land

	Avg. Of All Farms
Number of farms	14
Acres	375.70
Yield per acre (aum)	1.20
Operators share of yield %	100.00
Value per aum	15.83
Total product return per acre	18.92
Other crop income per acre	1.70
Gross return per acre	20.62
 Direct Expenses	
Fertilizer	1.27
Repairs	0.62
Custom hire	0.44
Miscellaneous	0.58
Total direct expenses per acre	2.91
Return over direct exp per acre	17.71
 Overhead Expenses	
RE & pers. property taxes	3.17
Farm insurance	0.19
Interest	5.01
Mach & bldg depreciation	0.70
Miscellaneous	0.42
Total overhead expenses per acre	9.49
Total dir & ovhd expenses per acre	12.40
Net return per acre	8.22

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 2 - North Central North Dakota, 2017
(Farms Sorted By Net Return)

Pasture on Cash Rent

	<u>Avg. Of All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	22	5	5
Acres	586.79	492.69	428.20
Yield per acre (aum)	0.87	0.82	1.23
Operators share of yield %	100.00	100.00	100.00
Value per aum	15.47	15.94	13.48
Total product return per acre	13.45	13.08	16.64
Other crop income per acre	0.50	-	2.28
Gross return per acre	13.95	13.08	18.92
Direct Expenses			
Fuel & oil	0.40	0.45	0.24
Repairs	0.93	0.97	0.63
Land rent	15.06	15.88	11.63
Miscellaneous	0.11	0.08	0.10
Total direct expenses per acre	16.50	17.38	12.60
Return over direct exp per acre	-2.55	-4.30	6.32
Overhead Expenses			
Mach & bldg depreciation	0.80	0.69	0.50
Miscellaneous	0.73	0.64	0.93
Total overhead expenses per acre	1.54	1.33	1.43
Total dir & ovhd expenses per acre	18.04	18.70	14.03
Net return per acre	-4.09	-5.63	4.89

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 2 - North Central North Dakota, 2017
(Farms Sorted By Net Return)

Peas, Field on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	7
Acres	118.38
Yield per acre (bu.)	47.53
Operators share of yield %	100.00
Value per bu.	6.91
Total product return per acre	328.26
Crop insurance per acre	3.31
Other crop income per acre	3.52
Gross return per acre	335.09
Direct Expenses	
Seed and plants	37.03
Fertilizer	14.67
Crop chemicals	34.21
Cover crop expense	0.65
Crop insurance	10.73
Fuel & oil	12.34
Repairs	29.14
Operating interest	1.36
Total direct expenses per acre	140.13
Return over direct exp per acre	194.96
Overhead Expenses	
Custom hire	6.68
Hired labor	11.91
Machinery leases	3.95
Building leases	0.31
RE & pers. property taxes	9.07
Farm insurance	4.12
Utilities	4.67
Dues & professional fees	0.41
Interest	25.46
Mach & bldg depreciation	36.44
Miscellaneous	3.01
Total overhead expenses per acre	106.02
Total dir & ovhd expenses per acre	246.15
Net return per acre	88.94
Government payments	18.74
Net return with govt pmts	107.68
Labor & management charge	29.93
Net return over lbr & mgt	77.75
Cost of Production	
Total direct expense per bu.	2.95
Total dir & ovhd exp per bu.	5.18
Less govt & other income	4.64
With labor & management	5.27
Net value per unit	6.91
Machinery cost per acre	86.37
Est. labor hours per acre	1.70

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 2 - North Central North Dakota, 2017
(Farms Sorted By Net Return)

Peas, Field on Cash Rent

	<u>Avg. Of All Farms</u>
Number of farms	11
Acres	226.27
Yield per acre (bu.)	37.03
Operators share of yield %	100.00
Value per bu.	6.76
Total product return per acre	250.23
Crop insurance per acre	16.56
Other crop income per acre	5.60
Gross return per acre	272.40
Direct Expenses	
Seed and plants	35.04
Fertilizer	18.89
Crop chemicals	41.09
Crop insurance	11.66
Fuel & oil	13.64
Repairs	27.44
Custom hire	0.57
Land rent	47.98
Machinery leases	0.93
Operating interest	4.82
Miscellaneous	0.67
Total direct expenses per acre	202.73
Return over direct exp per acre	69.67
Overhead Expenses	
Custom hire	2.97
Hired labor	12.34
Machinery leases	4.70
Building leases	3.88
Farm insurance	3.76
Utilities	2.63
Dues & professional fees	0.73
Interest	2.37
Mach & bldg depreciation	28.02
Miscellaneous	3.66
Total overhead expenses per acre	65.05
Total dir & ovhd expenses per acre	267.78
Net return per acre	4.62
Government payments	15.15
Net return with govt pmts	19.77
Labor & management charge	25.13
Net return over lbr & mgt	-5.36
Cost of Production	
Total direct expense per bu.	5.48
Total dir & ovhd exp per bu.	7.23
Less govt & other income	6.22
With labor & management	6.90
Net value per unit	6.76
Machinery cost per acre	77.13
Est. labor hours per acre	1.62

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 2 - North Central North Dakota, 2017
(Farms Sorted By Net Return)

Prevented planting on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	13
Acres	72.92
Yield per acre (\$)	-
Operators share of yield %	-
Value per \$	-
Total product return per acre	-
Crop insurance per acre	134.94
Other crop income per acre	1.34
Gross return per acre	136.28
Direct Expenses	
Crop chemicals	5.70
Cover crop expense	1.88
Crop insurance	9.06
Fuel & oil	4.70
Repairs	8.94
Operating interest	0.72
Total direct expenses per acre	31.00
Return over direct exp per acre	105.28
Overhead Expenses	
Custom hire	0.96
Hired labor	4.69
Machinery leases	0.65
Building leases	0.26
RE & pers. property taxes	6.32
Farm insurance	4.76
Utilities	2.77
Dues & professional fees	0.47
Interest	15.83
Mach & bldg depreciation	14.22
Miscellaneous	2.78
Total overhead expenses per acre	53.71
Total dir & ovhd expenses per acre	84.71
Net return per acre	51.57
Government payments	19.25
Net return with govt pmts	70.82
Labor & management charge	7.31
Net return over lbr & mgt	63.51

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 2 - North Central North Dakota, 2017
(Farms Sorted By Net Return)

Prevented planting on Cash Rent

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	26	5	5	6
Acres	110.29	136.53	111.76	151.25
Yield per acre (\$)	-	-	-	-
Operators share of yield %	-	-	-	-
Value per \$	-	-	-	-
Total product return per acre	-	-	-	-
Crop insurance per acre	142.17	122.66	117.70	174.30
Other crop income per acre	3.41	1.04	-	6.29
Gross return per acre	145.58	123.70	117.70	180.60
Direct Expenses				
Seed and plants	0.73	3.05	-	-
Crop chemicals	4.60	8.90	5.65	-
Crop insurance	10.73	14.82	13.17	6.85
Fuel & oil	5.07	8.81	4.30	1.62
Repairs	8.98	14.54	5.44	3.80
Land rent	44.98	66.78	28.29	41.82
Operating interest	1.82	4.07	2.15	0.53
Miscellaneous	0.45	-	0.06	-
Total direct expenses per acre	77.35	120.97	59.07	54.63
Return over direct exp per acre	68.23	2.72	58.63	125.97
Overhead Expenses				
Hired labor	4.40	11.51	0.45	2.02
Machinery leases	1.66	0.39	3.98	1.40
Building leases	0.53	2.10	-	0.01
Farm insurance	2.27	3.54	1.40	0.74
Utilities	1.31	1.92	0.78	0.53
Dues & professional fees	0.45	1.32	0.10	0.16
Interest	0.73	0.94	0.04	0.39
Mach & bldg depreciation	10.84	15.40	10.04	3.85
Miscellaneous	1.79	2.58	1.20	0.68
Total overhead expenses per acre	23.97	39.68	17.99	9.78
Total dir & ovhd expenses per acre	101.32	160.65	77.06	64.41
Net return per acre	44.26	-36.96	40.64	116.19
Government payments	17.44	18.59	19.44	13.22
Net return with govt pmts	61.70	-18.37	60.08	129.40
Labor & management charge	8.09	12.21	7.11	4.41
Net return over lbr & mgt	53.61	-30.58	52.97	125.00

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 2 - North Central North Dakota, 2017
(Farms Sorted By Net Return)

Soybeans on Owned Land

	<u>Avg. Of</u> <u>All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	45	9	9	9
Acres	278.14	224.09	159.42	239.55
Yield per acre (bu.)	31.50	24.72	31.29	37.75
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	8.86	8.90	8.95	8.81
Total product return per acre	279.08	219.91	280.09	332.62
Hedging gains/losses per acre	4.48	-	-	-
Crop insurance per acre	8.68	21.50	0.87	6.56
Other crop income per acre	3.20	1.29	5.54	5.81
Gross return per acre	295.44	242.70	286.51	344.99
Direct Expenses				
Seed and plants	69.43	77.69	72.63	62.78
Fertilizer	11.11	16.40	11.46	12.56
Crop chemicals	25.77	38.22	18.70	18.98
Crop insurance	18.42	14.73	14.56	15.58
Fuel & oil	12.96	10.90	12.64	10.36
Repairs	21.29	19.84	19.74	17.50
Custom hire	3.43	14.28	1.01	0.58
Machinery leases	1.80	1.19	0.45	-
Operating interest	4.11	6.18	3.25	0.81
Miscellaneous	1.05	2.82	2.09	-
Total direct expenses per acre	169.37	202.25	156.53	139.14
Return over direct exp per acre	126.08	40.45	129.98	205.84
Overhead Expenses				
Custom hire	1.27	1.25	0.90	0.85
Hired labor	10.37	6.71	8.16	4.84
Machinery leases	2.06	2.42	9.50	0.22
Building leases	0.37	0.61	0.02	0.45
RE & pers. property taxes	8.07	7.43	7.52	7.93
Farm insurance	5.33	4.55	4.43	4.72
Utilities	3.47	2.31	2.47	2.90
Dues & professional fees	1.16	2.99	0.73	0.25
Interest	24.79	34.91	20.65	8.08
Mach & bldg depreciation	29.86	22.18	24.01	40.71
Miscellaneous	2.82	0.75	3.11	1.62
Total overhead expenses per acre	89.58	86.11	81.49	72.58
Total dir & ovhd expenses per acre	258.94	288.36	238.02	211.73
Net return per acre	36.50	-45.66	48.49	133.26
Government payments	18.28	22.01	15.15	16.36
Net return with govt pmts	54.78	-23.65	63.64	149.62
Labor & management charge	23.50	23.96	25.07	22.73
Net return over lbr & mgt	31.29	-47.61	38.57	126.89
Cost of Production				
Total direct expense per bu.	5.38	8.18	5.00	3.69
Total dir & ovhd exp per bu.	8.22	11.67	7.61	5.61
Less govt & other income	7.12	9.85	6.92	4.85
With labor & management	7.87	10.82	7.72	5.45
Net value per unit	9.00	8.90	8.95	8.81
Machinery cost per acre	73.30	74.50	68.23	68.99
Est. labor hours per acre	1.27	1.27	1.24	1.16

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 2 - North Central North Dakota, 2017
(Farms Sorted By Net Return)

Soybeans on Cash Rent

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	69	13	14	14
Acres	636.56	618.36	783.56	410.09
Yield per acre (bu.)	31.58	26.13	32.41	37.12
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	8.91	8.91	8.90	8.90
Total product return per acre	281.35	232.79	288.41	330.24
Hedging gains/losses per acre	7.25	-	-	-
Crop insurance per acre	8.90	10.24	7.25	11.44
Other crop income per acre	3.18	1.30	-	5.31
Gross return per acre	300.69	244.33	295.66	346.99
Direct Expenses				
Seed and plants	68.21	77.78	68.70	56.18
Fertilizer	12.06	16.74	11.87	15.39
Crop chemicals	25.68	27.16	25.12	22.58
Crop insurance	14.76	15.67	15.79	12.35
Fuel & oil	11.86	14.89	10.12	10.69
Repairs	23.82	29.62	19.26	19.19
Custom hire	2.80	6.24	2.56	0.13
Land rent	54.66	56.56	49.94	50.83
Machinery leases	2.71	0.51	0.21	0.30
Operating interest	4.52	8.54	2.20	3.67
Miscellaneous	1.22	1.60	2.34	0.12
Total direct expenses per acre	222.31	255.32	208.11	191.42
Return over direct exp per acre	78.39	-10.99	87.55	155.56
Overhead Expenses				
Custom hire	2.14	0.53	4.21	1.98
Hired labor	6.80	6.51	7.42	2.67
Machinery leases	3.53	2.08	2.51	6.67
Building leases	0.60	1.26	0.09	1.87
Farm insurance	4.42	4.50	3.95	3.43
Utilities	3.11	3.23	2.48	2.41
Dues & professional fees	1.04	1.42	0.74	0.40
Interest	2.83	3.81	1.87	2.84
Mach & bldg depreciation	25.99	24.90	30.47	20.98
Miscellaneous	2.16	2.09	1.16	2.61
Total overhead expenses per acre	52.63	50.34	54.90	45.86
Total dir & ovhd expenses per acre	274.94	305.66	263.00	237.28
Net return per acre	25.76	-61.33	32.66	109.70
Government payments	17.17	20.71	11.90	17.58
Net return with govt pmts	42.93	-40.61	44.56	127.28
Labor & management charge	24.18	25.50	23.77	28.32
Net return over lbr & mgt	18.74	-66.11	20.79	98.96
Cost of Production				
Total direct expense per bu.	7.04	9.77	6.42	5.16
Total dir & ovhd exp per bu.	8.71	11.70	8.12	6.39
Less govt & other income	7.55	10.46	7.52	5.47
With labor & management	8.31	11.44	8.26	6.23
Net value per unit	9.14	8.91	8.90	8.90
Machinery cost per acre	74.05	81.05	70.10	60.00
Est. labor hours per acre	1.16	1.30	1.10	1.24

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Soybeans on Share Rent

	<u>Avg. Of All Farms</u>
Number of farms	16
Acres	326.03
Yield per acre (bu.)	34.30
Operators share of yield %	66.90
Value per bu.	8.86
Total product return per acre	203.34
Crop insurance per acre	0.58
Other crop income per acre	3.82
Gross return per acre	207.73
Direct Expenses	
Seed and plants	52.63
Fertilizer	7.13
Crop chemicals	20.08
Crop insurance	10.15
Fuel & oil	11.17
Repairs	17.96
Custom hire	0.93
Machinery leases	0.19
Operating interest	2.02
Miscellaneous	3.95
Total direct expenses per acre	126.23
Return over direct exp per acre	81.51
Overhead Expenses	
Custom hire	2.78
Hired labor	4.90
Machinery leases	3.03
Building leases	0.32
Farm insurance	4.25
Utilities	3.43
Dues & professional fees	0.60
Interest	1.42
Mach & bldg depreciation	32.79
Miscellaneous	2.79
Total overhead expenses per acre	56.30
Total dir & ovhd expenses per acre	182.52
Net return per acre	25.21
Government payments	16.08
Net return with govt pmts	41.29
Labor & management charge	22.51
Net return over lbr & mgt	18.78
Cost of Production	
Total direct expense per bu.	5.50
Total dir & ovhd exp per bu.	7.95
Less govt & other income	7.06
With labor & management	8.04
Net value per unit	8.86
Machinery cost per acre	69.13
Est. labor hours per acre	1.06

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

	<u>Avg. Of All Farms</u>
Number of farms	6
Acres	281.42
Yield per acre (cwt.)	18.17
Operators share of yield %	100.00
Value per cwt.	16.92
Total product return per acre	307.42
Crop insurance per acre	18.54
Other crop income per acre	4.32
Gross return per acre	330.28
Direct Expenses	
Seed and plants	43.51
Fertilizer	43.68
Crop chemicals	33.04
Crop insurance	20.10
Drying expense	3.91
Fuel & oil	13.04
Repairs	29.89
Custom hire	8.77
Land rent	50.35
Operating interest	14.13
Miscellaneous	2.01
Total direct expenses per acre	262.44
Return over direct exp per acre	67.84
Overhead Expenses	
Custom hire	4.60
Hired labor	9.96
Machinery leases	0.10
Building leases	1.59
Farm insurance	4.63
Utilities	2.55
Dues & professional fees	0.38
Interest	3.91
Mach & bldg depreciation	40.82
Miscellaneous	2.50
Total overhead expenses per acre	71.04
Total dir & ovhd expenses per acre	333.48
Net return per acre	-3.20
Government payments	30.00
Net return with govt pmts	26.80
Labor & management charge	29.58
Net return over lbr & mgt	-2.78
Cost of Production	
Total direct expense per cwt.	14.44
Total dir & ovhd exp per cwt.	18.35
Less govt & other income	15.44
With labor & management	17.07
Net value per unit	16.92
Machinery cost per acre	98.41
Est. labor hours per acre	1.35

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	44	8	9	9
Acres	316.39	293.00	306.54	363.12
Yield per acre (bu.)	53.18	40.75	51.26	67.79
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	5.59	5.82	5.46	5.59
Other product return per acre	0.02	-	0.12	-
Total product return per acre	297.22	237.34	279.79	379.17
Crop insurance per acre	5.74	17.70	5.96	1.65
Other crop income per acre	2.60	3.88	3.80	3.21
Gross return per acre	305.56	258.92	289.55	384.03
Direct Expenses				
Seed and plants	15.09	17.18	17.86	13.70
Fertilizer	50.61	50.22	49.96	54.08
Crop chemicals	30.74	37.87	31.52	27.90
Crop insurance	14.87	16.23	14.27	15.76
Fuel & oil	11.56	11.25	11.62	12.11
Repairs	20.42	27.10	19.46	16.17
Custom hire	2.43	8.38	3.78	-
Operating interest	3.56	7.53	3.74	0.58
Miscellaneous	2.57	11.48	1.20	0.47
Total direct expenses per acre	151.86	187.26	153.39	140.77
Return over direct exp per acre	153.70	71.66	136.16	243.26
Overhead Expenses				
Custom hire	3.19	4.05	2.40	5.15
Hired labor	7.90	8.82	8.03	5.15
Machinery leases	1.28	0.61	3.49	1.49
Building leases	0.35	0.91	0.04	0.17
RE & pers. property taxes	8.24	7.72	7.60	8.80
Farm insurance	4.83	5.11	4.17	4.72
Utilities	3.27	2.67	2.68	3.82
Dues & professional fees	0.76	1.52	0.51	0.44
Interest	17.93	29.12	16.87	14.32
Mach & bldg depreciation	30.54	33.62	28.55	34.45
Miscellaneous	2.37	2.56	2.57	2.79
Total overhead expenses per acre	80.66	96.71	76.91	81.28
Total dir & ovhd expenses per acre	232.52	283.97	230.30	222.05
Net return per acre	73.04	-25.05	59.25	161.98
Government payments	22.25	24.51	19.80	26.60
Net return with govt pmts	95.29	-0.54	79.05	188.58
Labor & management charge	23.32	21.96	24.49	25.95
Net return over lbr & mgt	71.97	-22.50	54.56	162.63
Cost of Production				
Total direct expense per bu.	2.86	4.60	2.99	2.08
Total dir & ovhd exp per bu.	4.37	6.97	4.49	3.28
Less govt & other income	3.80	5.84	3.91	2.81
With labor & management	4.23	6.38	4.39	3.19
Net value per unit	5.59	5.82	5.46	5.59
Machinery cost per acre	69.22	84.73	69.88	67.80
Est. labor hours per acre	1.22	1.16	1.30	1.10

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 2 - North Central North Dakota, 2017
(Farms Sorted By Net Return)

Wheat, Spring on Cash Rent

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	69	13	14	14
Acres	486.99	308.09	675.17	353.65
Yield per acre (bu.)	52.38	40.82	47.47	64.37
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	5.75	5.60	5.75	6.01
Other product return per acre	0.02	0.19	-	-
Total product return per acre	301.34	228.72	272.92	387.02
Crop insurance per acre	10.02	14.95	2.58	5.55
Other crop income per acre	3.18	1.16	2.34	5.11
Gross return per acre	314.55	244.84	277.84	397.68
Direct Expenses				
Seed and plants	16.15	14.51	14.58	16.83
Fertilizer	53.08	50.96	46.38	55.52
Crop chemicals	32.58	29.02	30.05	32.06
Crop insurance	16.21	16.48	15.17	18.46
Fuel & oil	10.84	12.32	9.18	12.34
Repairs	22.15	23.55	16.75	21.67
Custom hire	3.67	1.95	2.09	2.40
Land rent	52.96	57.84	50.74	51.05
Machinery leases	1.12	1.82	-	-
Operating interest	4.86	4.79	3.56	1.76
Miscellaneous	3.49	1.16	0.78	3.04
Total direct expenses per acre	217.12	214.41	189.29	215.14
Return over direct exp per acre	97.43	30.43	88.56	182.54
Overhead Expenses				
Custom hire	2.31	2.67	1.78	1.06
Hired labor	6.48	5.65	7.10	5.71
Machinery leases	3.65	8.50	1.90	5.05
Building leases	0.68	0.32	1.03	0.19
Farm insurance	4.04	4.22	3.55	3.55
Utilities	2.64	3.05	2.08	2.73
Dues & professional fees	0.70	1.54	0.52	0.42
Interest	2.66	2.50	2.54	1.52
Mach & bldg depreciation	25.52	23.63	23.98	28.97
Miscellaneous	2.17	2.10	1.96	2.65
Total overhead expenses per acre	50.85	54.18	46.43	51.85
Total dir & ovhd expenses per acre	267.97	268.59	235.72	266.99
Net return per acre	46.57	-23.75	42.12	130.69
Government payments	18.07	17.52	13.00	18.41
Net return with govt pmts	64.65	-6.23	55.13	149.10
Labor & management charge	24.63	21.78	22.14	30.84
Net return over lbr & mgt	40.02	-28.00	32.99	118.26
Cost of Production				
Total direct expense per bu.	4.14	5.25	3.99	3.34
Total dir & ovhd exp per bu.	5.12	6.58	4.97	4.15
Less govt & other income	4.52	5.75	4.59	3.70
With labor & management	4.99	6.28	5.05	4.17
Net value per unit	5.75	5.60	5.75	6.01
Machinery cost per acre	70.27	75.39	56.75	70.20
Est. labor hours per acre	1.18	1.28	1.09	1.29

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 2 - North Central North Dakota, 2017
(Farms Sorted By Net Return)

Wheat, Spring on Share Rent

	<u>Avg. Of All Farms</u>
Number of farms	17
Acres	330.95
Yield per acre (bu.)	55.61
Operators share of yield %	66.06
Value per bu.	5.59
Total product return per acre	205.44
Crop insurance per acre	0.65
Other crop income per acre	3.59
Gross return per acre	209.68
Direct Expenses	
Seed and plants	10.73
Fertilizer	39.58
Crop chemicals	26.73
Crop insurance	11.48
Fuel & oil	10.85
Repairs	18.87
Custom hire	1.00
Operating interest	2.12
Miscellaneous	3.22
Total direct expenses per acre	124.57
Return over direct exp per acre	85.11
Overhead Expenses	
Custom hire	2.63
Hired labor	5.36
Machinery leases	3.24
Building leases	0.32
Farm insurance	4.27
Utilities	2.90
Dues & professional fees	0.47
Interest	1.27
Mach & bldg depreciation	30.64
Miscellaneous	2.62
Total overhead expenses per acre	53.72
Total dir & ovhd expenses per acre	178.29
Net return per acre	31.39
Government payments	16.04
Net return with govt pmts	47.43
Labor & management charge	22.52
Net return over lbr & mgt	24.91
Cost of Production	
Total direct expense per bu.	3.39
Total dir & ovhd exp per bu.	4.85
Less govt & other income	4.30
With labor & management	4.91
Net value per unit	5.59
Machinery cost per acre	67.10
Est. labor hours per acre	1.15

EXPLANATORY NOTES FOR LIVESTOCK TABLES

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

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

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

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

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

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

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

Beef Cow-Calf -- Average Per Cwt. Produced

	<u>Avg. Of All Farms</u>	
Number of farms	12	
	Quantity	Value
Beef Calves sold (lb)	37.48	59.62
Transferred out (lb)	62.52	98.42
Cull sales (lb)		31.60
Other income		0.05
Purchased (lb)		-16.63
Transferred in (lb)		-21.35
Inventory change (lb)		-20.03
Gross margin		137.92
Direct Expenses		
Cake (lb.)	25.61	2.61
Protein Vit Minerals (lb.)	17.38	5.16
Corn (bu.)	0.51	1.43
Corn Silage (lb.)	728.44	9.97
Hay, Alfalfa (lb.)	108.44	4.09
Hay, Grass (lb.)	1,002.38	18.85
Pasture (aum)	1.28	20.97
Other feed stuffs (lb)	37.50	2.51
Veterinary		8.97
Supplies		3.20
Fuel & oil		4.69
Repairs		12.54
Custom hire		0.39
Marketing		0.41
Operating interest		1.25
Total direct expenses		97.06
Return over direct expense		40.86
Overhead Expenses		
Custom hire		0.95
Hired labor		1.78
Farm insurance		1.46
Utilities		1.90
Interest		1.52
Mach & bldg depreciation		9.20
Miscellaneous		0.59
Total overhead expenses		17.41
Total dir & ovhd expenses		114.47
Net return		23.46
Labor & management charge		8.85
Net return over lbr & mgt		14.61
Cost of Production Per Cwt. Produced		
Total direct expense per unit		97.05
Total dir & ovhd expense per unit		114.46
With other revenue adjustments		134.62
With labor and management		143.47
Est. labor hours per unit		1.02
Other Information		
Number of cows		169.5
Pregnancy percentage		88.9
Pregnancy loss percentage		2.8
Culling percentage		20.8
Calving percentage		86.5
Weaning percentage		83.4
Calves sold per cow		0.96
Calf death loss percent		4.6
Cow death loss percent		1.6
Average weaning weight		604
Lb. weaned/exposed female		504
Feed cost per cow		365.18
Avg wgt/ Beef Calves sold		605
Avg price / cwt.		159.09

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 All Farms</u>	
Number of farms	12	
	Quantity	Value
Beef Calves sold (lb)	208.6	331.91
Transferred out (lb)	348.0	547.86
Cull sales (lb)		175.91
Other income		0.29
Purchased (lb)		-92.59
Transferred in (lb)		-118.86
Inventory change (lb)		-111.48
Gross margin		767.80
Direct Expenses		
Cake (lb.)	142.6	14.54
Protein Vit Minerals (lb.)	96.7	28.71
Corn (bu.)	2.8	7.97
Corn Silage (lb.)	4,055.1	55.52
Hay, Alfalfa (lb.)	603.7	22.77
Hay, Grass (lb.)	5,580.0	104.95
Pasture (aum)	7.1	116.75
Other feed stuffs (lb)	208.7	13.97
Veterinary		49.96
Supplies		19.99
Fuel & oil		26.13
Repairs		69.81
Marketing		2.26
Operating interest		6.97
Total direct expenses		540.31
Return over direct expense		227.48
Overhead Expenses		
Custom hire		5.31
Hired labor		9.91
Farm insurance		8.13
Utilities		10.57
Interest		8.48
Mach & bldg depreciation		51.21
Miscellaneous		3.30
Total overhead expenses		96.90
Total dir & ovhd expenses		637.21
Net return		130.59
Labor & management charge		49.24
Net return over lbr & mgt		81.35
Cost of Production Per Cwt. Produced		
Total direct expense per unit		97.05
Total dir & ovhd expense per unit		114.46
With other revenue adjustments		134.62
With labor and management		143.47
Est. labor hours per unit		5.67
Other Information		
Number of cows		169.5
Pregnancy percentage		88.9
Pregnancy loss percentage		2.8
Culling percentage		20.8
Calving percentage		86.5
Weaning percentage		83.4
Calves sold per cow		0.96
Calf death loss percent		4.6
Cow death loss percent		1.6
Average weaning weight		604
Lb. weaned/exposed female		504
Feed cost per cow		365.18
Avg wgt/ Beef Calves sold		605
Avg price / cwt.		159.09

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 Cwt. Produced

	<u>Avg. Of All Farms</u>	
Number of farms	7	
	Quantity	Value
Beef Calves sold (lb)	78.45	107.16
Transferred out (lb)	1.31	1.71
Cull sales (lb)		28.15
Other income		-
Purchased (lb)		-42.02
Transferred in (lb)		-2.22
Inventory change (lb)		50.21
Gross margin		142.99
Direct Expenses		
Midds (lb.)	4.37	0.70
Protein Vit Minerals (lb.)	0.75	0.43
Corn (bu.)	0.08	0.23
Corn Silage (lb.)	20.22	0.35
Hay, Alfalfa (lb.)	196.09	5.38
Hay, Grass (lb.)	996.63	22.98
Pasture (aum)	1.07	14.68
Other feed stuffs (lb)	48.56	0.65
Veterinary		4.68
Supplies		2.31
Fuel & oil		5.05
Repairs		12.37
Custom hire		1.38
Hired labor		1.72
Operating interest		0.55
Total direct expenses		73.48
Return over direct expense		69.52
Overhead Expenses		
Custom hire		0.66
Hired labor		0.46
Farm insurance		2.47
Utilities		2.60
Interest		9.81
Mach & bldg depreciation		12.69
Miscellaneous		1.91
Total overhead expenses		30.61
Total dir & ovhd expenses		104.08
Net return		38.91
Labor & management charge		16.49
Net return over lbr & mgt		22.42
Cost of Production Per Cwt. Produced		
Total direct expense per unit		73.48
Total dir & ovhd expense per unit		104.08
With other revenue adjustments		121.61
With labor and management		138.11
Est. labor hours per unit		1.08
Other Information		
Number of cows		129.6
Pregnancy percentage		95.0
Pregnancy loss percentage		0.5
Culling percentage		17.9
Calving percentage		94.6
Weaning percentage		89.8
Calves sold per cow		0.72
Calf death loss percent		5.4
Cow death loss percent		1.2
Average weaning weight		609
Lb. weaned/exposed female		547
Feed cost per cow		247.58
Avg wgt/ Beef Calves sold		603
Avg price / cwt.		136.60

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	7	
	Quantity	Value
Beef Calves sold (lb)	427.7	584.18
Transferred out (lb)	7.2	9.31
Cull sales (lb)		153.47
Other income		-
Purchased (lb)		-229.06
Transferred in (lb)		-12.09
Inventory change (lb)		273.72
Gross margin		779.55
Direct Expenses		
Midds (lb.)	23.8	3.83
Protein Vit Minerals (lb.)	4.1	2.35
Corn (bu.)	0.5	1.27
Corn Silage (lb.)	110.2	1.93
Hay, Alfalfa (lb.)	1,069.0	29.31
Hay, Grass (lb.)	5,433.2	125.30
Pasture (aum)	5.8	80.04
Other feed stuffs (lb)	264.7	3.55
Veterinary		25.49
Supplies		12.59
Fuel & oil		27.55
Repairs		67.43
Custom hire		7.52
Hired labor		9.37
Operating interest		3.02
Total direct expenses		400.56
Return over direct expense		378.99
Overhead Expenses		
Custom hire		3.61
Hired labor		2.51
Farm insurance		13.46
Utilities		14.20
Interest		53.51
Mach & bldg depreciation		69.19
Miscellaneous		10.39
Total overhead expenses		166.86
Total dir & ovhd expenses		567.42
Net return		212.13
Labor & management charge		89.91
Net return over lbr & mgt		122.22
Cost of Production Per Cwt. Produced		
Total direct expense per unit		73.48
Total dir & ovhd expense per unit		104.08
With other revenue adjustments		121.61
With labor and management		138.11
Est. labor hours per unit		5.90
Other Information		
Number of cows		129.6
Pregnancy percentage		95.0
Pregnancy loss percentage		0.5
Culling percentage		17.9
Calving percentage		94.6
Weaning percentage		89.8
Calves sold per cow		0.72
Calf death loss percent		5.4
Cow death loss percent		1.2
Average weaning weight		609
Lb. weaned/exposed female		547
Feed cost per cow		247.58
Avg wgt/ Beef Calves sold		603
Avg price / cwt.		136.60

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

	<u>Avg. Of All Farms</u>	
Number of farms	7	
	Quantity	Value
Beef Replace sold (hd)	0.15	226.65
Transferred out (hd)	0.98	1,277.21
Cull sales (hd)	0.06	75.47
Other income		-
Purchased (hd)	0.06	-58.64
Transferred in (hd)	0.67	-640.29
Inventory change (hd)	-0.48	-446.09
Gross margin		466.83
Direct Expenses		
Protein Vit Minerals (lb.)	56.19	13.50
Corn (bu.)	5.27	14.29
Corn Silage (lb.)	1,754.17	21.35
Hay, Alfalfa (lb.)	876.00	27.60
Hay, Grass (lb.)	2,054.94	42.58
Pasture (aum)	4.78	74.28
Straw (lb.)	244.31	1.83
Other feed stuffs (lb)	21.93	1.75
Veterinary		14.32
Supplies		2.99
Fuel & oil		2.36
Repairs		6.20
Total direct expenses		223.04
Return over direct expense		243.78
Overhead Expenses		
Hired labor		1.37
Mach & bldg depreciation		3.48
Miscellaneous		5.27
Total overhead expenses		10.12
Total dir & ovhd expenses		233.17
Net return		233.66
Labor & management charge		6.33
Net return over lbr & mgt		227.33
Est. labor hours per unit		0.64
Other Information		
No. purchased or trans in		38
Number sold or trans out		59
Average number of head		53
Percentage death loss		0.7
Feed cost per average head		197.18
Feed cost/head sold/trans		174.61

Livestock Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 2 - North Central North Dakota, 2017
(Farms Sorted By Net Return)

Beef Replacement Heifers -- Average Per Head Sold/Trans

	<u>Avg. Of All Farms</u>	
Number of farms	7	
	Quantity	Value
Beef Replace sold (hd)	0.1	200.71
Transferred out (hd)	0.9	1,131.01
Cull sales (hd)	0.1	66.83
Other income		-
Purchased (hd)	0.1	-51.93
Transferred in (hd)	0.6	-566.99
Inventory change (hd)	-0.4	-395.02
Gross margin		413.39
Direct Expenses		
Protein Vit Minerals (lb.)	49.8	11.96
Barley (bu.)	0.2	0.40
Corn (bu.)	4.7	12.65
Corn Silage (lb.)	1,553.4	18.91
Hay, Alfalfa (lb.)	775.7	24.44
Hay, Grass (lb.)	1,819.7	37.70
Pasture (aum)	4.2	65.77
Straw (lb.)	216.3	1.62
Other feed stuffs (lb)	19.2	1.15
Veterinary		12.68
Supplies		2.40
Fuel & oil		2.09
Repairs		5.49
Marketing		0.24
Total direct expenses		197.51
Return over direct expense		215.88
Overhead Expenses		
Hired labor		1.21
Mach & bldg depreciation		3.08
Miscellaneous		4.67
Total overhead expenses		8.96
Total dir & ovhd expenses		206.48
Net return		206.91
Labor & management charge		5.61
Net return over lbr & mgt		201.31
Est. labor hours per unit		0.57
Other Information		
No. purchased or trans in		38
Number sold or trans out		59
Average number of head		53
Percentage death loss		0.7
Feed cost per average head		197.18
Feed cost/head sold/trans		174.61

Livestock Enterprise Analysis
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Beef Backgrounding -- Average Per Cwt. Produced

	<u>Avg. Of All Farms</u>	
Number of farms	8	
	Quantity	Value
Backgnd Beef sold (lb)	322.54	445.24
Transferred out (lb)	149.26	190.46
Other income		1.50
Transferred in (lb)	-130.94	-206.13
Inventory change (lb)	-242.51	-315.11
Gross margin		117.77
Direct Expenses		
Protein Vit Minerals (lb.)	86.05	15.34
Barley (bu.)	0.57	1.20
Corn (bu.)	1.64	4.59
Corn Silage (lb.)	314.40	3.83
Hay, Alfalfa (lb.)	231.49	7.33
Hay, Grass (lb.)	680.83	13.34
Pasture (aum)	0.29	5.31
DDGS, dry (lb.)	35.68	1.76
Other feed stuffs (lb)	61.85	1.32
Veterinary		1.59
Supplies		0.48
Fuel & oil		1.18
Repairs		2.45
Custom hire		1.71
Marketing		1.97
Total direct expenses		63.39
Return over direct expense		54.37
Overhead Expenses		
Hired labor		0.34
Utilities		0.62
Interest		0.70
Mach & bldg depreciation		1.51
Miscellaneous		0.82
Total overhead expenses		3.98
Total dir & ovhd expenses		67.38
Net return		50.39
Labor & management charge		1.90
Net return over lbr & mgt		48.49
Cost of Production Per Cwt. Produced		
Total direct expense per unit		123.60
Total dir & ovhd expense per unit		124.44
With other revenue adjustments		124.44
With labor and management		124.84
Est. labor hours per unit		0.24
Other Information		
No. purchased or trans in		43
Number sold or trans out		124
Percentage death loss		0.1
Avg. daily gain (lb.)		1.34
Lb. of conc / lb. of gain		2.52
Lb. of feed / lb. of gain		13.30
Feed cost per cwt. of gain		54.02
Feed cost per head		70.88
Avg wgt / Backgnd Beef sold		666
Avg sales price / cwt.		138.04

Livestock Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 2 - North Central North Dakota, 2017
(Farms Sorted By Net Return)

Beef Backgrounding -- Average Per Head

	<u>Avg. Of All Farms</u>	
Number of farms	8	
	Quantity	Value
Backgnd Beef sold (lb)	423.3	584.26
Transferred out (lb)	195.9	249.92
Other income		1.97
Transferred in (lb)	-171.8	-270.49
Inventory change (lb)	-318.2	-413.49
Gross margin		154.54
Direct Expenses		
Protein Vit Minerals (lb.)	112.9	20.14
Barley (bu.)	0.7	1.57
Corn (bu.)	2.1	6.03
Corn Silage (lb.)	412.6	5.03
Hay, Alfalfa (lb.)	303.8	9.61
Hay, Grass (lb.)	893.4	17.51
Pasture (aum)	0.4	6.97
DDGS, dry (lb.)	46.8	2.30
Other feed stuffs (lb)	81.2	1.73
Veterinary		2.08
Supplies		0.63
Fuel & oil		1.54
Repairs		3.22
Custom hire		2.24
Marketing		2.59
Total direct expenses		83.19
Return over direct expense		71.35
Overhead Expenses		
Utilities		0.81
Interest		0.91
Mach & bldg depreciation		1.98
Miscellaneous		1.52
Total overhead expenses		5.23
Total dir & ovhd expenses		88.41
Net return		66.12
Labor & management charge		2.49
Net return over lbr & mgt		63.63
Cost of Production Per Cwt. Produced		
Total direct expense per unit		123.60
Total dir & ovhd expense per unit		124.44
With other revenue adjustments		124.44
With labor and management		124.84
Est. labor hours per unit		0.31
Other Information		
No. purchased or trans in		43
Number sold or trans out		124
Percentage death loss		0.1
Avg. daily gain (lb.)		1.34
Lb. of conc / lb. of gain		2.52
Lb. of feed / lb. of gain		13.30
Feed cost per cwt. of gain		54.02
Feed cost per head		70.88
Avg wgt / Backgnd Beef sold		666
Avg sales price / cwt.		138.04

Figure 1. Gross Cash Income Per Farm

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

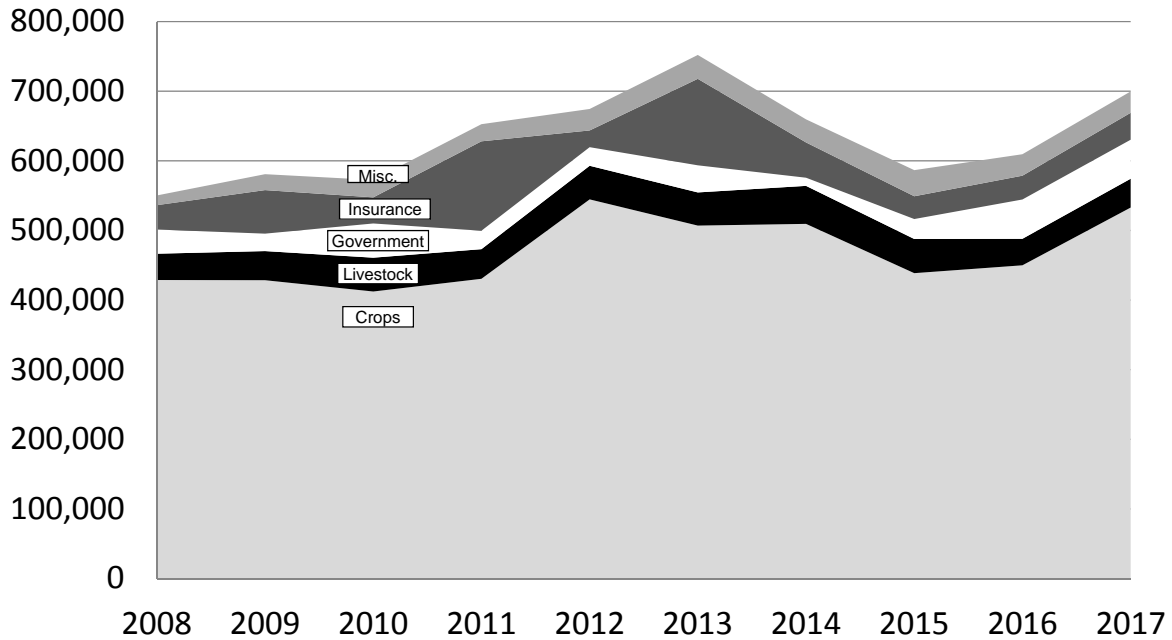


Figure 2. Net Farm Income (Accrual) Per Farm

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

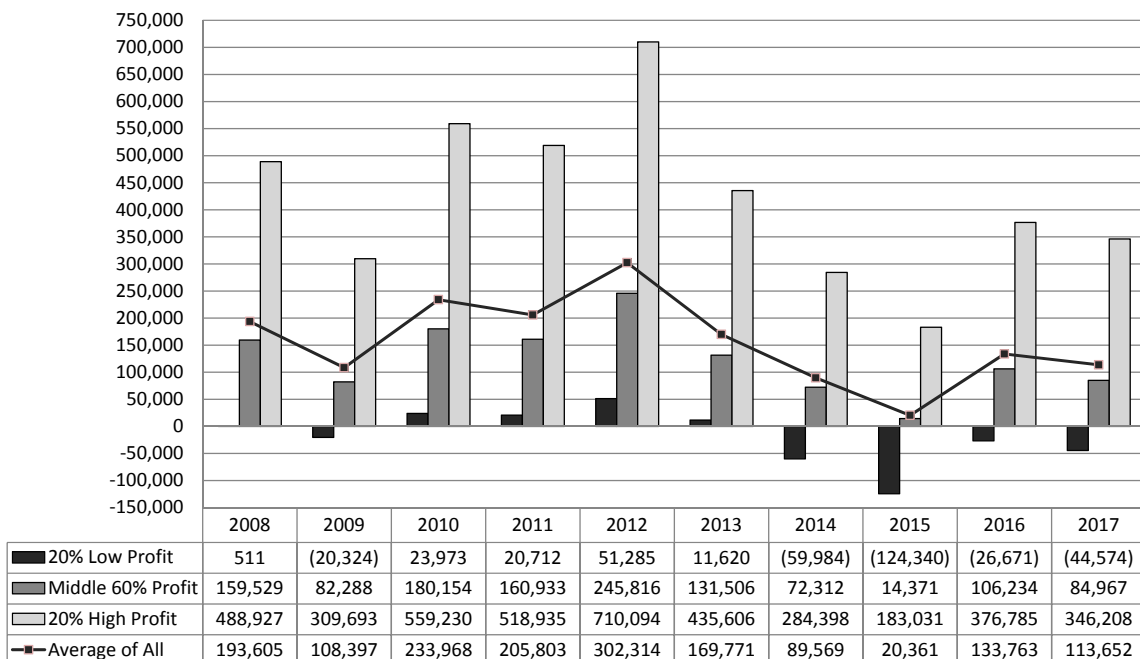


Figure 3. Financial Efficiency Measures (As Percent of Gross Revenue)

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

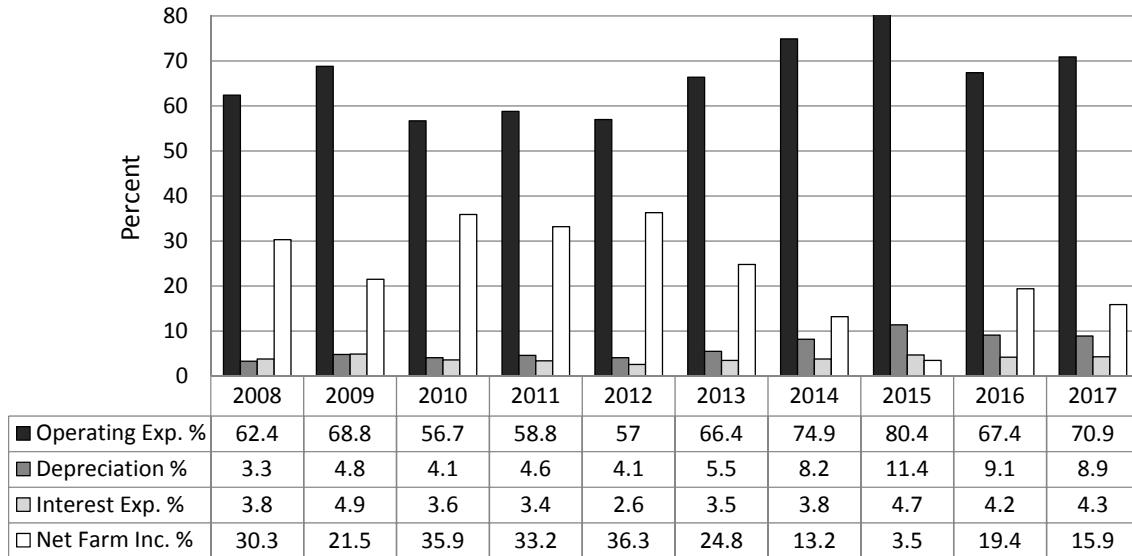


Figure 4. Profitability Measures Per Farm

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

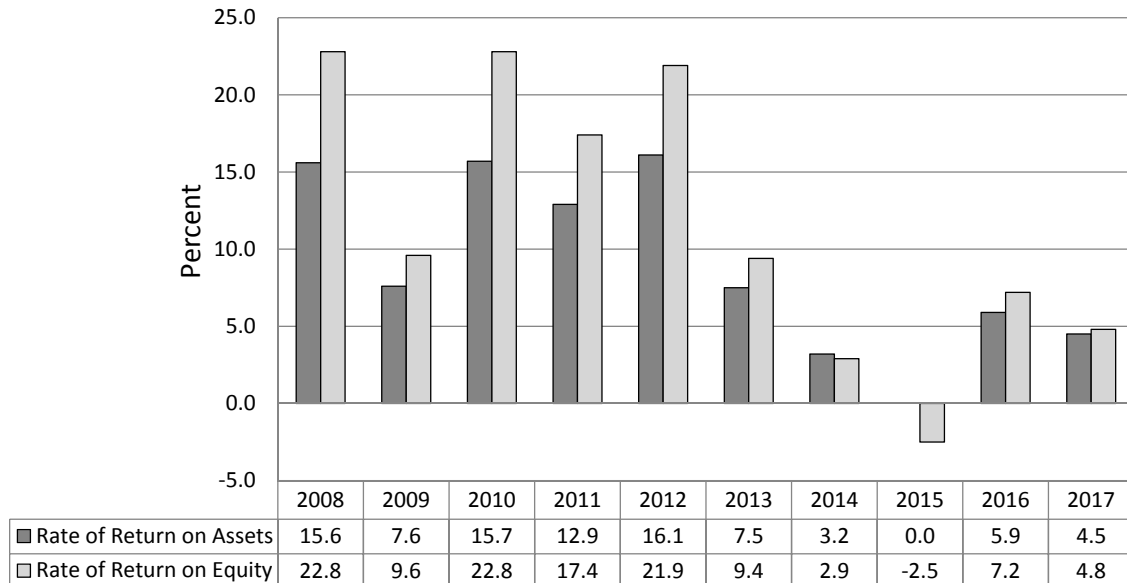


Figure 5. Assets and Liabilities Per Farm, 2017

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

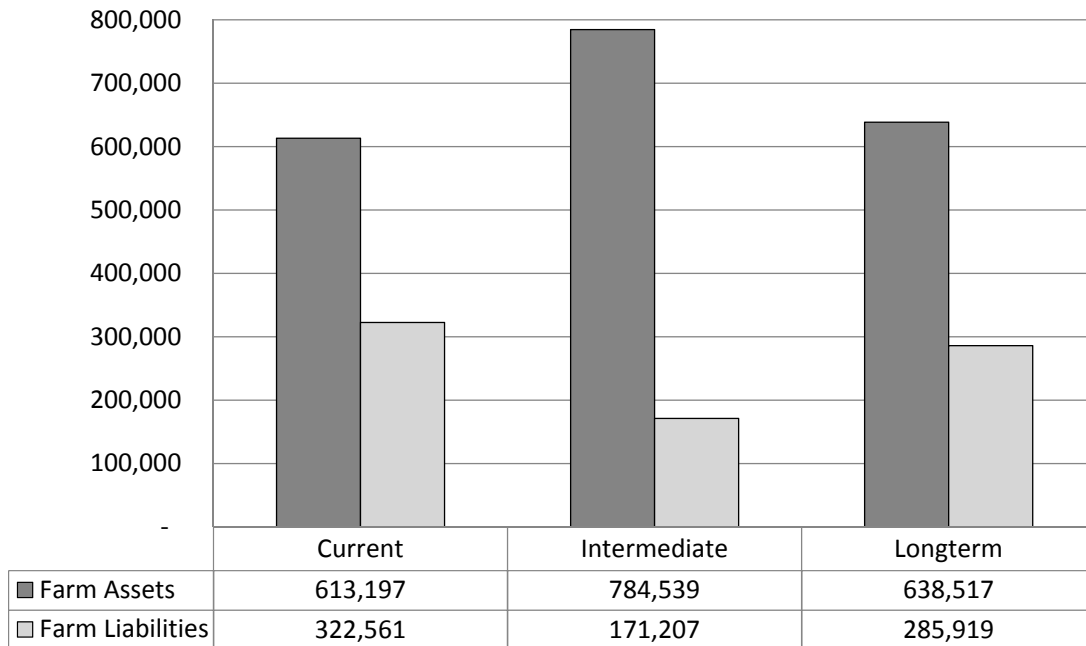


Figure 6. Total Farm Assets and Liabilities

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

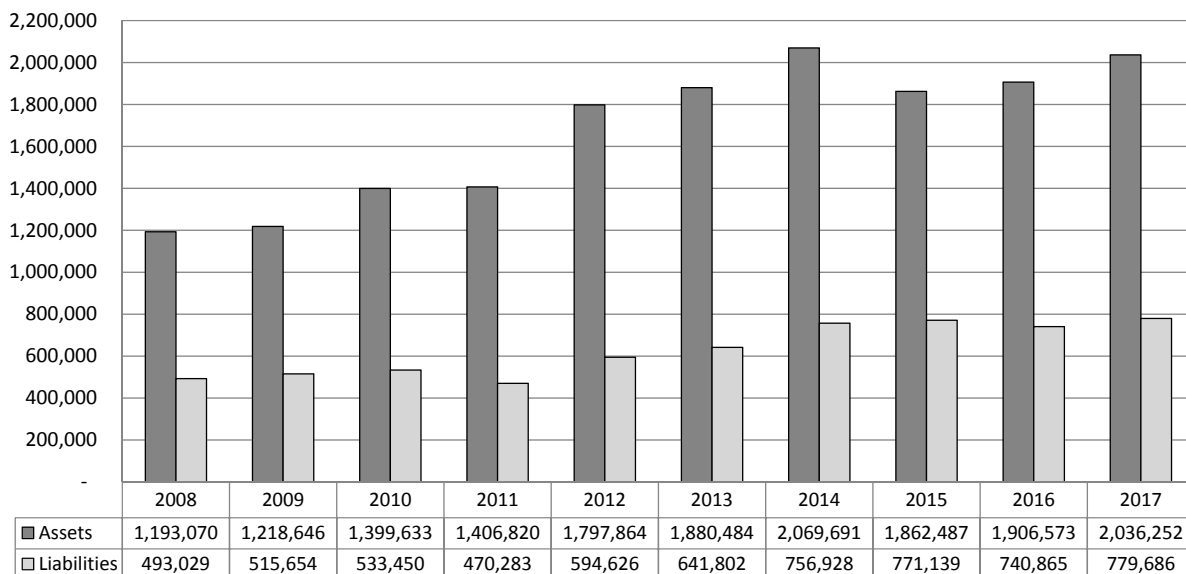


Figure 7. Household and Personal Expenses

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

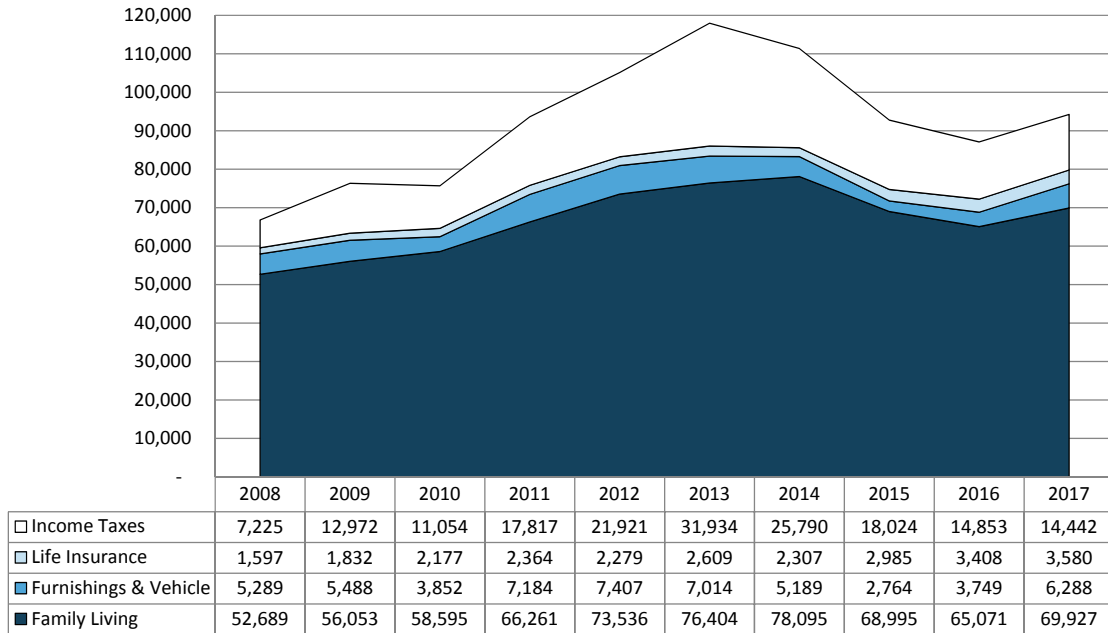


Figure 8. Crop Acreage Per Farm

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

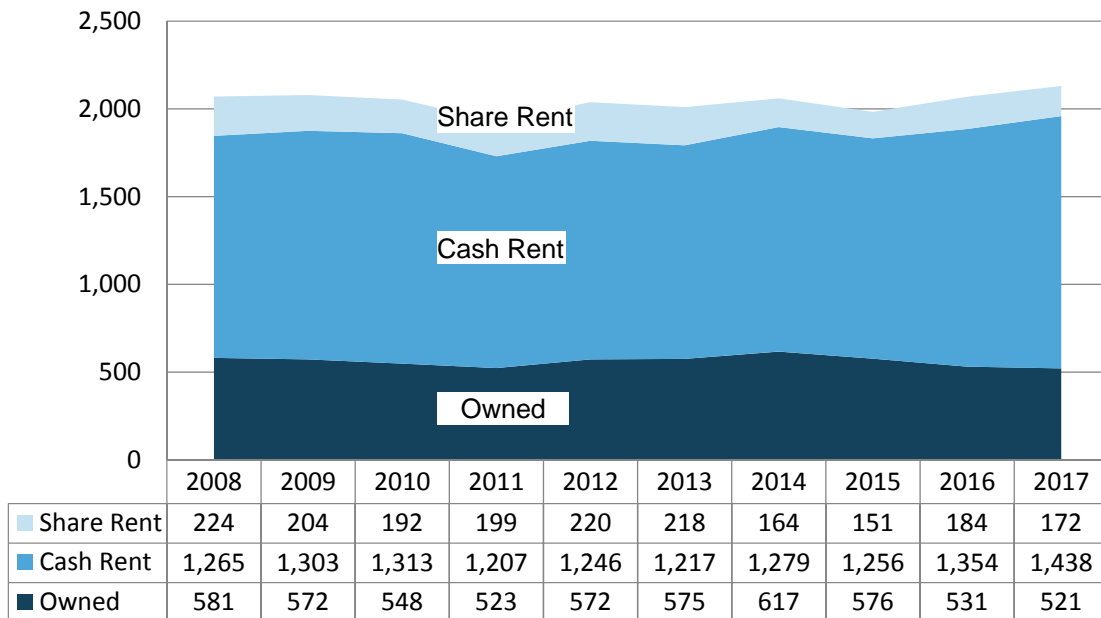


Figure 9. Spring Wheat Costs Per Acre

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

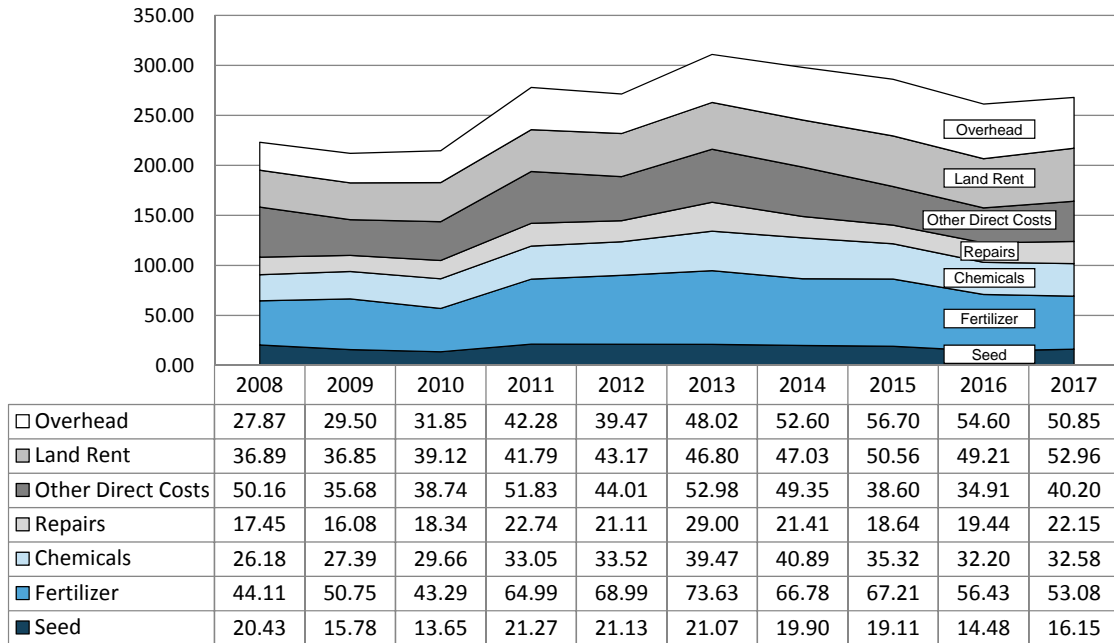


Figure 10. Average Net Return Per Beef Cow

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

