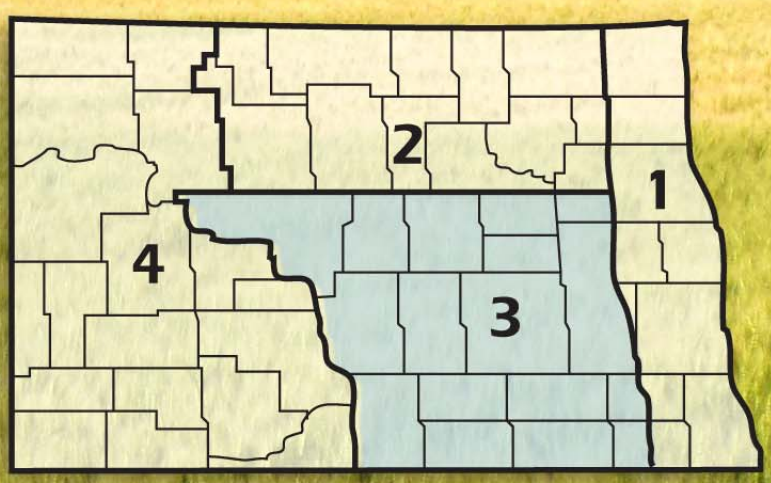
2011 ANNUAL REPORT
Region 3
North Dakota Farm and Ranch Business Management Education

Regional Reporting Areas



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NORTH DAKOTA
FARM BUSINESS MANAGEMENT EDUCATION

REGION 3 – SOUTH CENTRAL
2011 ANNUAL REPORT

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

School	Instructor
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Jamestown (JVATC)	Virgil Dagman
Fargo (NDSCS)	Ron Smithberg
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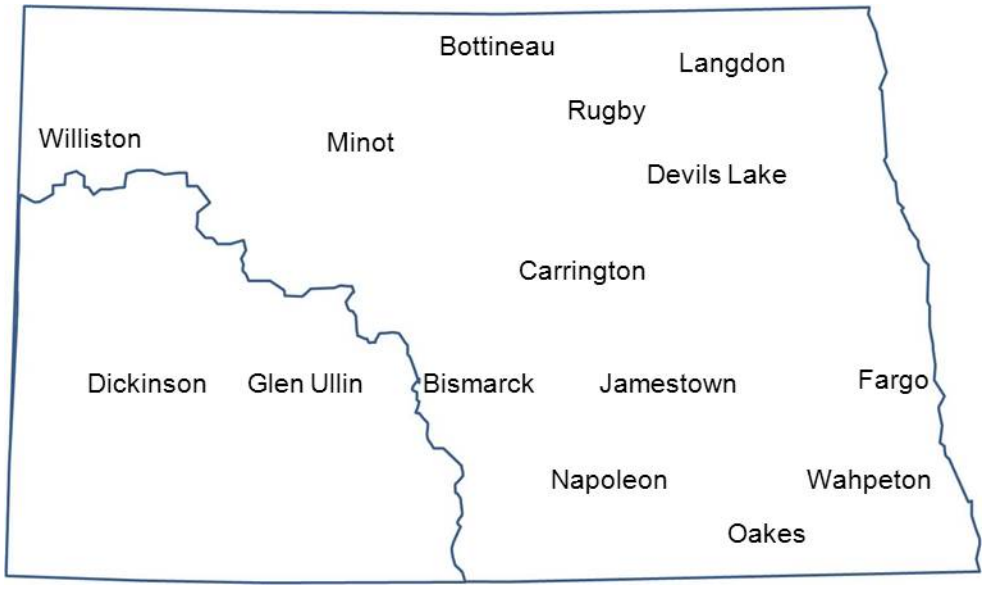
This report was made possible by the farm families who cooperated with their farm management instructors in getting the records for 2011 closed out on a timely basis. The farm management instructors cited above generated the Finpack year-end farm analyses. Andrew Swenson, NDSU Extension Service, databased the Finpack analyses of farms and generated the comparative tables for this report.

Location of all Farm Business Management Education Programs in North Dakota



2011 South Central Report
North Dakota Farm Business Management Education

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INTRODUCTION

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

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

The 2011 summary reports are based upon data generated by the Finan individual farm analysis completed by farm/ranch families enrolled in the statewide Adult Farm and Ranch Business Management Education program in North Dakota. Instructors pooled the individual business analysis and submitted the combined school data to the FINPACK Center located at North Dakota State University. The FINPACK Center did provide schools with local averages in order to assist instructors with obtaining relevant local management trends.

Farm/ranch families enrolled in the statewide program are encouraged to request assistance from their instructors to determine short-term cash flow and long-term projections. Each instructor has access to FINPACK computer programs, which can be used to generate annual or multi-year (cash flow) farm plans and/or long term alternative projections.

This is the 23rd year that the regional averages have been generated in North Dakota based upon the four regions shown in the state map on the cover of this publication. A regional report has been generated and published for Regions 2, 3 and 4 identified on the North Dakota map. Most farms in Region 1 are located within the Red River Valley. Those farms are contained in a combined Minnesota-North Dakota Red River Valley report. The state averages report includes all farms participating in the North Dakota Farm Business Management Education Program that were represented in the regional averages and also those farms which were processed and submitted after the March deadline date. All of these reports may be ordered from Farm Business Management, P.O. Box 6022, Bismarck, ND, 58506-6022 for $5 per copy. The reports are available online at www.ndfarmmanagement.com.

EXPLANATORY NOTES FOR THE FARM OPERATORS' REPORTS

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

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

Farm Income Statement

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

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

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

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

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

Inventory Changes

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

Depreciation

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

Profitability Measures

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

"**Rate of return on assets**" is the "Return on farm assets" divided by "Average farm assets."
"**Rate of return on equity** "is the "Return of farm equity" divided by "Average farm equity."
"**Operating profit margin**" is the "Return on farm assets" divided by "Value of farm production."
"**Asset turnover rate**" is the "Value of farm production" divided by "Average farm assets."
"**Farm interest expense**" is the accrual interest cost, usually it will be different from the cash interest expense.
"**Value of operator's labor and management**" is an opportunity cost for unpaid operator's labor and management that is used in the calculation of several financial performance measures. A value of $20,000 per full time operator plus 5% of value of farm production is used.
"**Return of farm assets**" is calculated by adding "Farm interest expense" to "Net farm income" and then subtracting the "Value of operator's labor and management."
"**Average farm assets**" is the average of beginning and ending total farm assets.
"**Return on farm equity**" is calculated by subtracting the "Value of operator's labor and management" from "Net farm income."
"**Average farm equity**" is the average of beginning and ending farm net worth.
"**Value of farm production**" is gross cash farm income minus purchased feed and feeder livestock and adjusted for inventory changes in crops, market livestock, accounts receivable and breeding livestock.

Liquidity & Repayment Capacity Measures

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

Balance Sheets

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

Statement of Cash Flows

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

Financial Standards Measures

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

Liquidity

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

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

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

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

Solvency

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

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

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

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

Profitability

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

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

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

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

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

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

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

Repayment Capacity

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

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

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

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

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

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

Efficiency

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

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

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

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

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

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

Crop Production and Marketing Summary

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

Household and Personal Expenses

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

Operator and Labor Information

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

Nonfarm Summary

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

Farm Income Statement
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	*Low 20%*	*40 - 60%*	*High 20%*
Number of farms	154	30	31	31
Cash Farm Income				
Barley	26,471	1,709	19,261	68,138
Beans, Black Turtle	2,265	-	-	5,849
Beans, Navy	1,062	-	-	-
Beans, Pinto	32,235	-	2,181	127,395
Buckwheat	218	-	-	-
Canola	8,937	3,058	7,312	14,777
Corn	115,108	57,151	53,886	291,134
Flax	2,980	834	3,723	6,969
Hay, Alfalfa	456	-	-	1,382
Hay, Mixed	67	233	5	26
Hay, Mixed Alfalfa/Grass	189	530	191	182
Millet	105	540	-	-
Oats	161	-	801	-
Peas, Field	3,027	-	575	11,294
Potatoes	3,032	-	-	15,065
Rye	255	284	990	-
Soybeans	149,249	42,971	107,325	359,989
Sunflowers	30,085	5,843	14,086	95,119
Sunflowers, Confectionary	5,513	658	-	12,442
Wheat, Durum	7,190	228	1,682	18,768
Wheat, Spring	153,435	23,106	89,275	459,917
Wheat, Winter	6,866	324	3,587	21,549
Rented Out	1,922	2,186	140	3,425
Soybeans, Food	4,384	-	10,704	7,066
Miscellaneous crop income	95	2	27	-
Beef Bulls	400	473	-	-
Beef Cow-Calf, Beef Calves	21,192	15,633	26,256	23,735
Beef Replacement Heifers	4,517	-	6,794	5,232
Beef Backgrounding	28,504	32,488	37,915	26,836
Beef Finishing	23,250	-	39,136	62,598
Beef Yearlings	1,021	-	4,773	-
Beef Grazing	1,209	-	-	5,903
Dairy, Milk	24,429	6,420	-	109,735
Dairy, Dairy Calves	446	-	-	2,205
Hogs, Farrow To Finish, Raised Ho	2,330	6	-	-
Hogs, Feeder Pig Prod, Feeder Pig	213	-	1,058	-
Hogs, Finish Feeder Pigs	977	-	4,853	-
Sheep, Feeder Lamb Prod, Fdr Lamb	65	205	-	-
Sheep, Feeder Lamb Prod, Wool	74	155	-	-
Sheep, Lamb Finishing	393	1,544	-	-
Sheep, Market Lamb Prod, Mkt Lamb	881	-	-	-
Beef Finish Cull Cows	403	-	-	-
Cull breeding livestock	10,884	10,101	13,759	15,742
Misc. livestock income	2,718	1,172	2,189	9,119
Direct, CCP & ACRE pymts	15,482	4,531	10,088	37,244
CRP payments	2,042	841	2,947	2,513
Other government payments	12,305	5,226	10,264	24,673
Custom work income	22,981	1,885	5,549	16,326
Patronage dividends, cash	3,896	1,626	4,166	9,833
Insurance income	102,268	27,590	80,537	224,920
Other farm income	9,951	4,063	5,335	28,974
Gross Cash Farm Income	848,141	253,616	571,366	2,126,075

Farm Income Statement (Continued)
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	*Low 20%*	*40 - 60%*	*High 20%*
Number of farms	154	30	31	31
Cash Farm Expense				
Seed	71,456	22,617	40,934	169,594
Fertilizer	85,080	25,347	51,613	233,659
Crop chemicals	42,042	15,925	27,204	104,986
Crop insurance	35,159	9,255	27,044	83,117
Drying expense	1,149	155	340	3,588
Storage	535	99	58	2,101
Irrigation energy	86	96	-	135
Crop marketing	509	10	155	1,018
Crop miscellaneous	1,169	493	935	1,465
Feeder livestock purchase	23,452	3,244	47,153	48,116
Purchased feed	33,031	10,573	18,101	57,628
Breeding fees	401	299	-	1,255
Veterinary	4,012	2,200	3,952	7,975
Supplies	2,365	459	1,243	7,449
Livestock leases	81	203	-	110
Livestock marketing	1,686	1,057	1,220	4,315
Interest	28,621	12,891	22,267	48,641
CCC buyback	5,208	-	-	24,221
Fuel & oil	45,782	17,803	32,022	102,238
Repairs	53,508	25,851	34,384	112,940
Custom hire	16,999	7,741	15,177	32,447
Hired labor	23,081	3,814	10,562	70,994
Land rent	70,317	22,707	47,312	164,177
Machinery leases	5,509	476	3,389	8,570
Building leases	372	33	301	432
Real estate taxes	4,061	2,301	3,353	7,019
Farm insurance	9,113	3,278	6,897	18,114
Utilities	7,358	3,679	5,392	16,687
Dues & professional fees	2,250	668	1,349	5,139
Miscellaneous	11,944	5,242	10,063	23,253
Total cash expense	586,337	198,513	412,420	1,361,385
Net cash farm income	261,804	55,103	158,946	764,690
Inventory Changes				
Prepaids and supplies	3,639	579	769	24,538
Accounts receivable	24,048	1,526	26,090	73,595
Hedging accounts	-3,889	-1,818	-2,234	-15,734
Other current assets	-263	1,893	451	-2,210
Crops and feed	-17,574	-34,732	-18,444	-54,283
Market livestock	10,141	3,949	15,637	-1,684
Breeding livestock	-3,188	-6,556	-1,351	-206
Other assets	1,419	848	2,121	4,729
Accounts payable	-233	-2,425	-10,657	2,784
Accrued interest	344	-695	-772	-273
Total inventory change	14,444	-37,431	11,611	31,256
Net operating profit	276,248	17,671	170,557	795,946
Depreciation				
Machinery and equipment	-42,582	-7,676	-31,777	-106,506
Titled vehicles	-2,651	-1,270	-3,780	-4,143
Buildings and improvements	-4,576	-434	-2,542	-13,995
Total depreciation	-49,809	-9,380	-38,099	-124,643
Net farm income from operations	226,439	8,292	132,458	671,303
Gain or loss on capital sales	3,959	779	4,804	4,083
Net farm income	230,398	9,070	137,262	675,386

Inventory Changes
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	*Low 20%*	*40 - 60%*	*High 20%*
Number of farms	154	30	31	31
Net cash farm income	261,804	55,103	158,946	764,690
Crops and Feed				
Ending inventory	434,636	50,550	209,526	1,373,229
Beginning inventory	452,209	85,282	227,970	1,427,512
Inventory change	-17,574	-34,732	-18,444	-54,283
Market Livestock				
Ending inventory	62,979	41,830	90,529	76,826
Beginning inventory	52,838	37,881	74,892	78,510
Inventory change	10,141	3,949	15,637	-1,684
Accts Receivable				
Ending inventory	47,254	10,607	38,682	122,562
Beginning inventory	23,206	9,081	12,592	48,966
Inventory change	24,048	1,526	26,090	73,595
Prepaid Expenses and Supplies				
Ending inventory	77,296	15,253	30,361	233,454
Beginning inventory	73,657	14,674	29,591	208,916
Inventory change	3,639	579	769	24,538
Hedging Activities				
Ending inventory	3,243	470	2,331	10,191
Withdrawals	2,563	838	3,065	5,124
Beginning inventory	6,729	422	1,903	27,968
Deposits	2,967	2,704	5,727	3,081
Gain or loss	-3,889	-1,818	-2,234	-15,734
Other Current Assets				
Ending inventory	2,514	2,036	2,227	3,839
Beginning inventory	2,777	143	1,776	6,048
Inventory change	-263	1,893	451	-2,210
Breeding Livestock				
Ending inventory	95,955	69,935	87,314	150,990
Capital sales	3,045	1,203	8,486	311
Beginning inventory	88,852	67,630	86,198	139,280
Capital purchases	13,336	10,063	10,953	12,226
Depreciation, capital adjust	-3,188	-6,556	-1,351	-206
Other Capital Assets				
Ending inventory	43,365	6,918	17,950	135,304
Capital sales	345	-	14	1,688
Beginning inventory	32,057	6,070	14,399	94,299
Capital purchases	10,234	-	1,445	37,963
Depreciation, capital adjust	1,419	848	2,121	4,729
Accounts Payable				
Beginning inventory	16,931	13,575	8,403	26,736
Ending inventory	17,164	16,000	19,059	23,952
Inventory change	-233	-2,425	-10,657	2,784
Accrued Interest				
Beginning inventory	11,204	4,299	8,744	15,989
Ending inventory	10,860	4,994	9,515	16,262
Inventory change	344	-695	-772	-273
Total inventory change	14,444	-37,431	11,611	31,256
Net operating profit	276,248	17,671	170,557	795,946

Depreciation
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	*Low 20%*	*40 - 60%*	*High 20%*
Number of farms	154	30	31	31
Net operating profit	276,248	17,671	170,557	795,946
Machinery and Equipment				
Ending inventory	516,600	126,689	342,116	1,324,085
Capital sales	9,850	4,443	3,861	21,801
Beginning inventory	416,419	112,767	295,502	1,029,497
Capital purchases	152,612	26,039	82,252	422,894
Depreciation, capital adjust.	-42,582	-7,676	-31,777	-106,506
Titled Vehicles				
Ending inventory	27,653	9,932	29,526	54,140
Capital sales	639	763	403	-
Beginning inventory	25,179	8,739	23,624	52,694
Capital purchases	5,764	3,226	10,085	5,590
Depreciation, capital adjust.	-2,651	-1,270	-3,780	-4,143
Buildings and Improvements				
Ending inventory	137,260	34,374	83,697	368,130
Capital sales	8	-	-	-
Beginning inventory	117,526	24,664	59,674	326,648
Capital purchases	24,318	10,143	26,565	55,477
Depreciation, capital adjust.	-4,576	-434	-2,542	-13,995
Total depreciation, capital adj.	-49,809	-9,380	-38,099	-124,643
Net farm income from operations	226,439	8,292	132,458	671,303
Gain or loss on capital sales	3,959	779	4,804	4,083
Net farm income	230,398	9,070	137,262	675,386

Profitability Measures
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	*Low 20%*	*40 - 60%*	*High 20%*
Number of farms	154	30	31	31
Profitability (assets valued at cost)				
Net farm income from operations	226,439	8,292	132,458	671,303
Rate of return on assets	11.0 %	-0.1 %	8.9 %	13.5 %
Rate of return on equity	14.5 %	-4.6 %	12.0 %	16.7 %
Operating profit margin	24.9 %	-0.3 %	20.6 %	30.0 %
Asset turnover rate	44.3 %	35.2 %	43.4 %	45.1 %
Farm interest expense	28,277	13,586	23,039	48,914
Value of operator lbr and mgmt.	55,130	22,462	46,721	112,196
Return on farm assets	199,586	-584	108,776	608,021
Average farm assets	1,809,946	581,710	1,216,389	4,492,830
Return on farm equity	171,309	-14,170	85,737	559,107
Average farm equity	1,177,906	307,147	714,637	3,345,492
Value of farm production	802,711	204,517	527,931	2,026,725

Liquidity & Repayment Capacity Measures
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	*Low 20%*	*40 - 60%*	*High 20%*
Number of farms	154	30	31	31
Liquidity				
Current ratio	2.05	1.28	1.83	2.92
Working capital	247,022	29,267	187,817	803,573
Working capital to gross inc	35.7 %	13.4 %	32.0 %	50.7 %
Current assets	482,666	133,028	415,016	1,221,218
Current liabilities	235,643	103,761	227,198	417,645
Gross revenues (accrual)	691,856	218,333	587,507	1,584,813
Repayment capacity				
Net farm income from operations	226,439	8,292	132,458	671,303
Depreciation	49,809	9,380	38,099	124,643
Personal income	30,002	37,056	23,802	17,335
Family living/owner withdrawals	-61,054	-36,846	-55,974	-96,936
Payments on personal debt	-4,365	-2,139	-5,416	-5,861
Income taxes paid	-17,043	-7,140	-7,790	-34,913
Interest on term debt	21,157	9,219	15,029	41,594
Capital debt repayment capacity	244,945	17,821	140,207	717,166
Scheduled term debt payments	-75,330	-32,937	-56,923	-140,169
Capital debt repayment margin	169,615	-15,116	83,285	576,997
Cash replacement allowance	-23,792	-4,848	-11,618	-74,654
Replacement margin	145,823	-19,964	71,667	502,344
Term debt coverage ratio	3.25	0.54	2.46	5.12
Replacement coverage ratio	2.47	0.47	2.05	3.34

Balance Sheet at Cost Values
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	*Low 20%*	*40 - 60%*	*High 20%*
Number of farms	141	30	28	21
Assets				
Current Farm Assets				
Cash and checking balance	24,646	11,673	21,520	45,712
Prepaid expenses & supplies	58,457	15,253	32,604	171,629
Growing crops	1,283	486	2,465	1,944
Accounts receivable	36,438	10,607	37,719	85,858
Hedging accounts	1,855	470	2,009	4,474
Crops held for sale or feed	295,446	51,158	222,498	827,419
Crops under government loan	-	-	-	-
Market livestock held for sale	63,625	41,830	96,199	84,135
Other current assets	916	1,550	-	48
Total current farm assets	482,666	133,028	415,016	1,221,218
Intermediate Farm Assets				
Breeding livestock	79,649	69,935	78,131	78,721
Machinery and equipment	410,600	126,689	336,438	979,531
Titled vehicles	22,273	9,932	31,475	28,306
Other intermediate assets	5,375	5,349	5,137	1,333
Total intermediate farm assets	517,896	211,904	451,182	1,087,892
Long Term Farm Assets				
Farm land	402,722	203,392	339,430	792,803
Buildings and improvements	104,649	34,374	89,665	243,498
Other long-term assets	13,910	1,569	14,736	9,872
Total long-term farm assets	521,281	239,334	443,831	1,046,174
Total Farm Assets	1,521,843	584,267	1,310,029	3,355,285
Total Nonfarm Assets	195,197	73,110	182,777	305,777
Total Assets	1,717,040	657,376	1,492,806	3,661,062
Liabilities				
Current Farm Liabilities				
Accrued interest	10,552	4,994	9,504	16,584
Accounts payable	15,773	16,000	18,940	18,277
Current notes	159,918	60,801	158,692	292,325
Government crop loans	-	-	-	-
Principal due on term debt	49,400	21,965	40,062	90,460
Total current farm liabilities	235,643	103,761	227,198	417,645
Total intermediate farm liabs	151,218	87,413	116,804	194,419
Total long term farm liabilities	218,885	87,598	197,950	406,931
Total farm liabilities	605,746	278,771	541,953	1,018,995
Total nonfarm liabilities	39,767	19,144	38,855	56,337
Total liabilities	645,513	297,915	580,808	1,075,332
Net worth (farm and nonfarm)	1,071,527	359,461	911,998	2,585,730
Net worth change	141,287	1,573	99,305	441,308
Percent net worth change	15 %	0 %	12 %	21 %
Ratio Analysis				
Current farm liabilities / assets	49 %	78 %	55 %	34 %
Intermediate farm liab. / assets	29 %	41 %	26 %	18 %
Long term farm liab. / assets	42 %	37 %	45 %	39 %
Total debt to asset ratio	38 %	45 %	39 %	29 %

Statement Of Cash Flows
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	*Low 20%*	*40 - 60%*	*High 20%*
Number of farms	154	30	31	31
Beginning cash (farm & nonfarm)	34,431	19,430	34,979	78,518
Cash Provided By Operating Activities				
Gross cash farm income	848,141	253,616	571,366	2,126,075
Total cash farm expense	-586,337	-198,513	-412,420	-1,361,385
Net cash from hedging transactions	-404	-1,866	-2,662	2,043
Cash provided by operating	261,400	53,237	156,284	766,733
Cash Provided By Investing Activities				
Sale of breeding livestock	4,098	1,203	12,216	311
Sale of machinery & equipment	11,354	5,221	4,935	25,884
Sale of titled vehicles	691	763	403	-
Sale of farm land	1,825	-	-	-
Sale of farm buildings	2	-	-	-
Sale of other farm assets	480	-	14	1,688
Sale of nonfarm assets	1,137	117	2,526	951
Purchase of breeding livestock	-13,336	-10,063	-10,953	-12,226
Purchase of machinery & equip.	-152,612	-26,039	-82,252	-422,894
Purchase of titled vehicles	-5,764	-3,226	-10,085	-5,590
Purchase of farm land	-26,936	-	-53,008	-
Purchase of farm buildings	-24,318	-10,143	-26,565	-55,477
Purchase of other farm assets	-10,234	-	-1,445	-37,963
Purchase of nonfarm assets	-28,944	-6,320	-15,735	-48,125
Cash provided by investing	-242,560	-48,488	-179,949	-553,441
Cash Provided By Financing Activities				
Money borrowed	543,012	115,867	498,182	1,021,025
Principal payments	-511,157	-111,719	-435,368	-1,118,547
Personal income	30,002	37,056	23,802	17,335
Family living/owner withdrawals	-61,054	-36,846	-55,974	-96,936
Income and social security tax	-17,043	-7,140	-7,790	-34,913
Capital contributions	-	-	-	-
Capital distributions	-963	-	-	-
Dividends paid	-	-	-	-
Cash gifts and inheritances	3,165	-	2,223	323
Gifts given	-476	-1,640	-	-
Other cash flows	3	-	-	2
Cash provided by financing	-14,511	-4,422	25,074	-211,711
Net change in cash balance	4,329	326	1,410	1,581
Ending cash (farm & nonfarm)	38,760	19,757	36,389	80,099

Financial Standards Measures
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	*Low 20%*	*40 - 60%*	*High 20%*
Number of farms	154	30	31	31
Liquidity				
Current ratio	2.05	1.28	1.83	2.92
Working capital	247,022	29,267	187,817	803,573
Working capital to gross inc	35.7 %	13.4 %	32.0 %	50.7 %
Solvency (cost)				
Farm debt to asset ratio	40 %	48 %	41 %	30 %
Farm equity to asset ratio	60 %	52 %	59 %	70 %
Farm debt to equity ratio	0.66	0.91	0.71	0.44
Profitability (cost)				
Rate of return on farm assets	11.0 %	-0.1 %	8.9 %	13.5 %
Rate of return on farm equity	14.5 %	-4.6 %	12.0 %	16.7 %
Operating profit margin	24.9 %	-0.3 %	20.6 %	30.0 %
Net farm income	230,398	9,070	137,262	675,386
EBIDTA	304,525	31,257	193,596	844,860
Repayment Capacity				
Capital debt repayment capacity	244,945	17,821	140,207	717,166
Capital debt repayment margin	169,615	-15,116	83,285	576,997
Replacement margin	145,823	-19,964	71,667	502,344
Term debt coverage ratio	3.25	0.54	2.46	5.12
Replacement coverage ratio	2.47	0.47	2.05	3.34
Efficiency				
Asset turnover rate (cost)	44.3 %	35.2 %	43.4 %	45.1 %
Operating expense ratio	64.6 %	85.7 %	67.4 %	60.4 %
Depreciation expense ratio	5.8 %	4.3 %	6.4 %	5.8 %
Interest expense ratio	3.3 %	5.9 %	3.8 %	2.3 %
Net farm income ratio	26.8 %	4.2 %	23.1 %	31.7 %

Crop Production and Marketing Summary
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	*Low 20%*	*40 - 60%*	*High 20%*
Number of farms	154	30	31	31
Acreage Summary				
Total acres owned	910	509	776	1,561
Total crop acres	1,970	656	1,474	4,413
Crop acres owned	553	236	549	981
Crop acres cash rented	1,306	366	826	3,206
Crop acres share rented	111	55	99	226
Total pasture acres	614	488	692	662
Percent crop acres owned	28 %	36 %	37 %	22 %
Average Price Received (Cash Sales Only)				
Soybeans per bushel	11.13	11.12	11.14	11.19
Wheat, Spring per bushel	7.27	7.84	7.22	7.07
Corn per bushel	5.15	5.27	5.27	5.11
Barley per bushel	4.69	-	4.83	4.55
Sunflowers per cwt	25.19	-	24.72	25.26
Beans, Pinto per cwt	29.88	-	-	30.22
Wheat, Winter per bushel	6.02	-	6.55	5.83
Canola per cwt	21.76	-	-	-
Wheat, Durum per bushel	8.94	-	-	-
Flax per bushel	11.82	-	-	-
Peas, Field per bushel	6.39	-	-	-
Sunflowers, Confectionary per cwt	26.86	-	-	-
Soybeans, Food per bushel	14.55	-	-	-
Average Yield Per Acre				
Wheat, Spring (bushel)	32.12	21.80	26.56	34.58
Soybeans (bushel)	28.91	18.48	29.85	31.00
Corn (bushel)	110.86	78.07	96.28	123.84
Pasture (aum)	1.01	1.03	1.02	1.13
Sunflowers (cwt)	12.93	-	9.92	14.02
Hay, Mixed Alfalfa/Grass (ton)	2.10	1.56	2.22	1.97
Hay, Grass (ton)	1.56	1.14	1.43	1.72
Hay, Alfalfa (ton)	2.67	1.89	3.00	3.62
Canola (cwt)	15.18	-	15.18	15.76
Wheat, Winter (bushel)	44.98	-	32.97	47.74
Beans, Pinto (cwt)	14.24	-	-	15.64
Barley (bushel)	49.53	-	51.09	51.53
Corn Silage (ton)	13.67	7.17	-	16.50
Hay, Small Grain (ton)	2.67	-	-	-
Hay, Mixed (ton)	1.80	-	-	-
Flax (bushel)	16.06	-	-	-

Household and Personal Expenses
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	*Low 20%*	*40 - 60%*	*High 20%*
Number of farms	73	16	15	11
Average family size	3.0	2.8	3.0	3.8
Family Living Expenses				
Food and meals expense	7,688	6,969	6,281	10,064
Medical care	3,748	1,561	4,211	5,979
Health insurance	5,544	3,049	7,920	6,353
Cash donations	1,675	1,543	1,631	2,428
Household supplies	7,463	6,846	6,376	9,953
Clothing	2,163	1,301	1,670	3,194
Personal care	8,122	2,861	8,183	13,456
Child / Dependent care	828	1,426	221	1,113
Alimony and child support	16	-	80	-
Gifts	2,174	810	3,730	1,354
Education	2,015	306	1,826	5,644
Recreation	3,540	1,752	2,995	5,370
Utilities (household share)	3,140	2,146	3,832	4,124
Personal vehicle operating exp	3,531	2,429	4,265	3,288
Household real estate taxes	213	-	157	-
Dwelling rent	71	221	-	115
Household repairs	2,707	2,743	3,514	2,708
Personal interest	842	307	1,623	552
Disability / Long term care ins	437	699	455	54
Life insurance payments	2,067	1,235	1,487	3,545
Personal property insurance	192	222	144	471
Miscellaneous	933	516	1,525	1,098
Total cash family living expense	59,109	38,941	62,126	80,861
Family living from the farm	85	53	229	177
Total family living	59,194	38,994	62,355	81,038
Other Nonfarm Expenditures				
Income taxes	19,550	8,878	9,465	31,535
Furnishing & appliance purchases	180	11	209	637
Nonfarm vehicle purchases	4,397	2,162	6,798	4,536
Nonfarm real estate purchases	8,987	2,739	9,469	26,241
Other nonfarm capital purchases	9,024	389	1,074	1,448
Nonfarm savings & investments	6,168	-563	9,238	1,789
Total other nonfarm expenditures	48,306	13,616	36,253	66,186
Total cash family living investment & nonfarm capital purch	107,415	52,557	98,379	147,048

Operator and Labor Information
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	*Low 20%*	*40 - 60%*	*High 20%*
Number of farms	154	30	31	31
Operator Information				
Average number of operators	1.1	1.0	1.1	1.3
Average age of operators	45.8	43.7	48.3	46.7
Average number of years farming	21.9	18.2	24.6	23.6
Results Per Operator				
Working capital	379,009	29,267	157,092	1,121,954
Total assets (cost)	1,949,402	657,376	1,338,889	3,866,420
Total liabilities	636,501	297,915	527,526	888,764
Net worth (cost)	1,312,901	359,461	811,363	2,977,656
Gross farm income	797,083	218,333	540,845	1,652,664
Total farm expense	587,013	210,042	420,074	1,132,404
Net farm income from operations	210,070	8,292	120,771	520,260
Net nonfarm income	27,833	37,056	21,701	13,435
Family living & tax withdrawals	72,452	43,986	58,138	102,183
Total acres owned	843.8	509.5	707.8	1,209.9
Total crop acres	1,828.0	656.4	1,343.7	3,419.7
Crop acres owned	513.3	236.1	500.2	760.2
Crop acres cash rented	1,211.7	365.8	753.5	2,484.3
Crop acres share rented	102.9	54.5	90.0	175.2
Total pasture acres	569.4	487.8	630.8	512.7
Labor Analysis				
Number of farms	154	30	31	31
Total unpaid labor hours	2,084	1,382	2,032	2,977
Total hired labor hours	1,262	235	487	4,082
Total labor hours per farm	3,346	1,616	2,519	7,059
Unpaid hours per operator	1,934	1,382	1,853	2,308

Nonfarm Summary
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	*Low 20%*	*40 - 60%*	*High 20%*
Number of farms	154	30	31	31
Nonfarm Income				
Personal wages & salary	19,759	28,831	15,918	12,022
Net nonfarm business income	3,859	4,407	1,369	254
Personal rental income	1,640	-	715	1,813
Personal interest income	437	146	206	1,595
Personal cash dividends	51	-	128	-
Tax refunds	451	1,171	401	33
Nontaxable personal inc.	3	-	-	2
Other nonfarm income	3,805	2,501	5,065	1,619
Total nonfarm income	30,005	37,056	23,802	17,337
Gifts and inheritances	3,165	-	2,223	323

Financial Summary
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Gross Farm Income)

	Avg. Of All Farms	*Less than 50,000*	*50,001 - 100,000*	*100,001 - 250,000*	*250,001 - 500,000*	*500,001 - 1,000,000*	*Over 1,000,000*
Number of farms	154	6	10	24	33	41	40
Income Statement							
Gross cash farm income	848,141	39,441	75,394	176,236	390,067	729,540	2,065,253
Total cash farm expense	586,337	45,244	71,233	146,811	283,736	493,565	1,404,731
Net cash farm income	261,804	-5,803	4,161	29,425	106,331	235,975	660,523
Inventory change	14,444	21,686	39,329	33,621	20,375	-8,123	13,869
Depreciation	-49,809	-3,086	-5,397	-8,566	-18,094	-47,541	-121,156
Net farm income from operations	226,439	12,796	38,094	54,480	108,612	180,311	553,236
Gain or loss on capital sales	3,959	-	4,643	7,864	-42	5,628	3,627
Average net farm income	230,398	12,796	42,737	62,344	108,571	185,939	556,863
Median net farm income	138,596	9,079	35,373	60,751	98,025	184,452	474,899
Profitability (cost)							
Rate of return on assets	11.0 %	2.0 %	9.5 %	9.6 %	10.4 %	8.8 %	12.4 %
Rate of return on equity	14.5 %	0.6 %	23.3 %	14.9 %	15.6 %	11.5 %	15.6 %
Operating profit margin	24.9 %	8.2 %	23.2 %	25.6 %	22.4 %	22.5 %	26.2 %
Asset turnover rate	44.3 %	24.5 %	40.8 %	37.4 %	46.6 %	39.0 %	47.1 %
Liquidity & Repayment (end of year)							
Current assets	482,666	51,011	66,012	147,666	270,473	508,320	1,191,646
Current liabilities	235,643	35,867	46,878	84,061	152,120	238,716	555,440
Current ratio	2.05	1.42	1.41	1.76	1.78	2.13	2.15
Working capital	247,022	15,144	19,134	63,606	118,353	269,604	636,206
Working capital to gross inc	35.7 %	23.7 %	16.4 %	31.6 %	28.0 %	37.0 %	38.1 %
Term debt coverage ratio	3.25	4.15	2.41	2.37	2.10	2.61	4.02
Replacement coverage ratio	2.47	3.01	2.15	1.98	1.87	2.02	2.87
Solvency (end of year at cost)							
Number of sole proprietors	141	6	10	24	32	40	29
Total farm assets	1,521,843	247,584	311,045	499,828	908,514	1,873,638	3,240,348
Total farm liabilities	605,746	98,959	206,471	249,894	408,392	712,587	1,213,181
Total assets	1,717,040	269,168	395,576	567,243	1,049,363	2,182,823	3,518,121
Total liabilities	645,513	114,047	273,161	265,038	439,966	757,224	1,271,470
Net worth	1,071,527	155,121	122,416	302,205	609,397	1,425,599	2,246,651
Net worth change	141,287	20,888	37,539	53,022	81,786	139,629	342,962
Farm debt to asset ratio	40 %	40 %	66 %	50 %	45 %	38 %	37 %
Total debt to asset ratio	38 %	42 %	69 %	47 %	42 %	35 %	36 %
Nonfarm Information							
Net nonfarm income	30,002	35,342	40,866	29,166	32,634	36,752	17,898
Farms reporting living expenses	73	2	2	12	18	24	15
Total family living expense	59,194	-	-	44,348	46,958	65,252	84,909
Crop Acres							
Total acres owned	910	247	128	386	649	1,437	1,193
Total crop acres	1,970	331	310	525	1,129	1,814	4,354
Total crop acres owned	553	59	86	184	451	697	903
Total crop acres cash rented	1,306	104	184	296	593	1,073	3,201
Total crop acres share rented	111	168	40	46	85	44	250

Financial Summary
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Age Of Operator)

	Avg. Of All Farms	*Less Than 31*	*31 - 40*	*41 - 50*	*51 - 60*	*Over 60*
Number of farms	154	28	25	34	49	18
Income Statement						
Gross cash farm income	848,141	455,301	617,185	1,299,934	979,464	569,121
Total cash farm expense	586,337	365,373	465,718	911,571	631,057	361,517
Net cash farm income	261,804	89,928	151,467	388,363	348,406	207,604
Inventory change	14,444	79,817	46,334	-7,815	-11,415	-19,100
Depreciation	-49,809	-22,527	-25,285	-79,460	-62,783	-34,981
Net farm income from operations	226,439	147,219	172,516	301,088	274,208	153,523
Gain or loss on capital sales	3,959	3,266	-	7,526	793	12,415
Average net farm income	230,398	150,485	172,516	308,614	275,001	165,938
Median net farm income	138,596	92,607	83,870	185,899	164,484	72,242
Profitability (cost)						
Rate of return on assets	11.0 %	17.3 %	13.3 %	11.6 %	10.2 %	6.9 %
Rate of return on equity	14.5 %	33.3 %	21.7 %	16.7 %	12.3 %	7.5 %
Operating profit margin	24.9 %	26.2 %	25.9 %	22.9 %	26.2 %	23.8 %
Asset turnover rate	44.3 %	66.0 %	51.3 %	50.5 %	38.9 %	28.9 %
Liquidity & Repayment (end of year)						
Current assets	482,666	280,039	354,725	716,504	558,587	368,420
Current liabilities	235,643	156,880	201,199	392,181	241,023	117,171
Current ratio	2.05	1.79	1.76	1.83	2.32	3.14
Working capital	247,022	123,160	153,526	324,323	317,564	251,250
Working capital to gross inc	35.7 %	23.3 %	26.9 %	30.9 %	43.0 %	69.1 %
Term debt coverage ratio	3.25	4.14	2.93	2.65	3.72	3.69
Replacement coverage ratio	2.47	3.61	2.76	2.12	2.62	2.01
Solvency (end of year at cost)						
Number of sole proprietors	141	27	23	30	44	17
Total farm assets	1,521,843	803,907	1,126,538	2,093,252	1,867,062	1,295,042
Total farm liabilities	605,746	458,104	535,163	907,239	633,393	332,129
Total assets	1,717,040	873,416	1,229,245	2,335,076	2,098,373	1,639,242
Total liabilities	645,513	506,686	557,278	960,794	661,546	387,503
Net worth	1,071,527	366,730	671,967	1,374,283	1,436,826	1,251,739
Net worth change	141,287	124,011	116,659	199,051	153,343	68,902
Farm debt to asset ratio	40 %	57 %	48 %	43 %	34 %	26 %
Total debt to asset ratio	38 %	58 %	45 %	41 %	32 %	24 %
Nonfarm Information						
Net nonfarm income	30,002	21,527	25,905	24,977	29,882	58,697
Farms reporting living expenses	73	7	13	16	24	13
Total family living expense	59,194	38,907	46,544	86,020	62,398	43,836
Crop Acres						
Total acres owned	910	179	394	1,016	1,319	1,445
Total crop acres	1,970	1,128	1,237	2,935	2,341	1,467
Total crop acres owned	553	92	265	761	760	717
Total crop acres cash rented	1,306	982	927	1,990	1,431	706
Total crop acres share rented	111	54	45	185	151	44

Financial Summary
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Farm Type)

	Avg. Of All Farms	*Crop*	*Beef*	*Crop and Beef*	*Other*
Number of farms	154	77	10	28	33
Income Statement					
Gross cash farm income	848,141	1,103,478	347,933	465,216	576,206
Total cash farm expense	586,337	726,216	274,663	354,617	439,760
Net cash farm income	261,804	377,262	73,270	110,599	136,446
Inventory change	14,444	7,165	1,627	36,427	33,421
Depreciation	-49,809	-69,446	-19,061	-28,974	-27,523
Net farm income from operations	226,439	314,981	55,835	118,052	142,344
Gain or loss on capital sales	3,959	3,490	11,563	1,676	5,405
Average net farm income	230,398	318,470	67,399	119,728	147,750
Median net farm income	138,596	224,266	52,629	96,898	84,565
Profitability (cost)					
Rate of return on assets	11.0 %	11.3 %	5.9 %	8.7 %	12.1 %
Rate of return on equity	14.5 %	14.2 %	8.1 %	12.1 %	18.6 %
Operating profit margin	24.9 %	25.3 %	19.1 %	24.5 %	24.5 %
Asset turnover rate	44.3 %	44.6 %	30.8 %	35.6 %	49.3 %
Liquidity & Repayment (end of year)					
Current assets	482,666	631,802	245,845	369,620	347,362
Current liabilities	235,643	277,118	170,460	227,831	167,786
Current ratio	2.05	2.28	1.44	1.62	2.07
Working capital	247,022	354,684	75,385	141,789	179,576
Working capital to gross inc	35.7 %	40.8 %	22.6 %	27.9 %	30.2 %
Term debt coverage ratio	3.25	3.69	1.98	2.53	2.91
Replacement coverage ratio	2.47	2.60	1.69	2.13	2.47
Solvency (end of year at cost)					
Number of sole proprietors	141	69	9	28	31
Total farm assets	1,521,843	1,923,755	687,422	1,253,699	1,158,882
Total farm liabilities	605,746	686,779	418,928	529,226	543,262
Total assets	1,717,040	2,184,118	759,356	1,409,789	1,294,964
Total liabilities	645,513	734,444	464,631	554,564	579,530
Net worth	1,071,527	1,449,674	294,725	855,225	715,434
Net worth change	141,287	185,286	50,621	101,240	120,260
Farm debt to asset ratio	40 %	36 %	61 %	42 %	47 %
Total debt to asset ratio	38 %	34 %	61 %	39 %	45 %
Nonfarm Information					
Net nonfarm income	30,002	34,429	28,939	26,057	25,625
Farms reporting living expenses	73	39	2	14	16
Total family living expense	59,194	72,161	-	50,480	37,447
Crop Acres					
Total acres owned	910	1,045	338	876	880
Total crop acres	1,970	2,698	667	1,153	1,305
Total crop acres owned	553	693	142	508	450
Total crop acres cash rented	1,306	1,839	409	586	811
Total crop acres share rented	111	167	116	58	44

EXPLANATORY NOTES FOR CROPS TABLES

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

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

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

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

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

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

Crop Enterprise Analysis
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Net Return)

Barley on Owned Land

	Avg. Of All Farms
Number of fields	11
Number of farms	8
Acres	210.05
Yield per acre (bu.)	47.52
Operators share of yield %	100.00
Value per bu.	5.40
Total product return per acre	256.35
Crop insurance per acre	29.11
Gross return per acre	285.46
Direct Expenses	
Seed	18.12
Fertilizer	61.68
Crop chemicals	20.07
Crop insurance	18.91
Fuel & oil	12.69
Repairs	14.56
Custom hire	10.26
Operating interest	4.12
Total direct expenses per acre	160.40
Return over direct exp per acre	125.06
Overhead Expenses	
Hired labor	9.25
Machinery leases	0.92
Building leases	0.27
RE & pers. property taxes	6.00
Farm insurance	4.96
Utilities	2.23
Dues & professional fees	0.48
Interest	28.54
Mach & bldg depreciation	22.39
Miscellaneous	7.56
Total overhead expenses per acre	82.60
Total dir & ovhd expenses per acre	243.00
Net return per acre	42.47
Government payments	11.26
Net return with govt pmts	53.72
Labor & management charge	24.10
Net return over lbr & mgt	29.62
Cost of Production	
Total direct expense per bu.	3.38
Total dir & ovhd exp per bu.	5.11
Less govt & other income	4.26
With labor & management	4.77
Net value per unit	5.40
Machinery cost per acre	61.14
Est. labor hours per acre	1.11

Crop Enterprise Analysis
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Net Return)

Barley on Cash Rent

	Avg. Of All Farms
Number of fields	12
Number of farms	12
Acres	338.82
Yield per acre (bu.)	49.91
Operators share of yield %	100.00
Value per bu.	5.71
Total product return per acre	285.17
Crop insurance per acre	36.54
Gross return per acre	321.72
Direct Expenses	
Seed	15.61
Fertilizer	63.32
Crop chemicals	28.03
Crop insurance	17.94
Fuel & oil	18.15
Repairs	25.66
Custom hire	5.51
Land rent	47.64
Operating interest	2.33
Miscellaneous	0.12
Total direct expenses per acre	224.28
Return over direct exp per acre	97.44
Overhead Expenses	
Hired labor	9.66
Machinery leases	0.52
Building leases	0.24
Farm insurance	4.52
Utilities	3.12
Dues & professional fees	1.91
Interest	2.82
Mach & bldg depreciation	29.35
Miscellaneous	6.16
Total overhead expenses per acre	58.30
Total dir & ovhd expenses per acre	282.58
Net return per acre	39.14
Government payments	9.27
Net return with govt pmts	48.41
Labor & management charge	21.12
Net return over lbr & mgt	27.29
Cost of Production	
Total direct expense per bu.	4.49
Total dir & ovhd exp per bu.	5.66
Less govt & other income	4.74
With labor & management	5.17
Net value per unit	5.71
Machinery cost per acre	79.84
Est. labor hours per acre	1.02

Crop Enterprise Analysis
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Net Return)

Beans, Pinto on Owned Land

	Avg. Of All Farms
Number of fields	10
Number of farms	5
Acres	118.83
Yield per acre (cwt.)	16.02
Operators share of yield %	100.00
Value per cwt.	40.05
Total product return per acre	641.79
Crop insurance per acre	21.26
Gross return per acre	663.06
Direct Expenses	
Seed	35.46
Fertilizer	41.01
Crop chemicals	35.27
Crop insurance	25.78
Fuel & oil	29.21
Repairs	44.05
Custom hire	3.20
Operating interest	15.46
Total direct expenses per acre	229.44
Return over direct exp per acre	433.62
Overhead Expenses	
Hired labor	21.82
RE & pers. property taxes	6.76
Farm insurance	3.80
Utilities	3.21
Dues & professional fees	1.89
Interest	20.49
Mach & bldg depreciation	30.43
Miscellaneous	9.70
Total overhead expenses per acre	98.10
Total dir & ovhd expenses per acre	327.54
Net return per acre	335.52
Government payments	7.99
Net return with govt pmts	343.51
Labor & management charge	36.55
Net return over lbr & mgt	306.96
Cost of Production	
Total direct expense per cwt.	14.32
Total dir & ovhd exp per cwt.	20.44
Less govt & other income	18.61
With labor & management	20.89
Net value per unit	40.05
Machinery cost per acre	107.97
Est. labor hours per acre	1.74

Crop Enterprise Analysis
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Net Return)

Beans, Pinto on Cash Rent

	Avg. Of All Farms
Number of fields	14
Number of farms	8
Acres	339.25
Yield per acre (cwt.)	13.72
Operators share of yield %	100.00
Value per cwt.	40.57
Total product return per acre	556.57
Crop insurance per acre	2.93
Gross return per acre	559.50
Direct Expenses	
Seed	37.95
Fertilizer	29.20
Crop chemicals	54.76
Crop insurance	22.01
Fuel & oil	20.88
Repairs	33.58
Custom hire	6.48
Land rent	55.50
Operating interest	5.59
Total direct expenses per acre	265.95
Return over direct exp per acre	293.54
Overhead Expenses	
Hired labor	14.10
Machinery leases	3.46
Farm insurance	4.40
Utilities	2.90
Dues & professional fees	1.41
Interest	3.53
Mach & bldg depreciation	24.38
Miscellaneous	5.05
Total overhead expenses per acre	59.24
Total dir & ovhd expenses per acre	325.19
Net return per acre	234.31
Government payments	8.52
Net return with govt pmts	242.83
Labor & management charge	25.42
Net return over lbr & mgt	217.41
Cost of Production	
Total direct expense per cwt.	19.39
Total dir & ovhd exp per cwt.	23.71
Less govt & other income	22.87
With labor & management	24.72
Net value per unit	40.57
Machinery cost per acre	89.93
Est. labor hours per acre	1.03

Crop Enterprise Analysis
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Net Return)

Canola on Owned Land

	Avg. Of All Farms
Number of fields	10
Number of farms	9
Acres	112.04
Yield per acre (cwt.)	16.88
Operators share of yield %	100.00
Value per cwt.	22.40
Total product return per acre	378.28
Crop insurance per acre	25.83
Gross return per acre	404.11
Direct Expenses	
Seed	48.00
Fertilizer	90.97
Crop chemicals	19.69
Crop insurance	18.09
Fuel & oil	20.21
Repairs	14.20
Custom hire	6.35
Operating interest	2.26
Miscellaneous	0.36
Total direct expenses per acre	220.13
Return over direct exp per acre	183.98
Overhead Expenses	
Hired labor	6.60
RE & pers. property taxes	4.54
Farm insurance	3.33
Utilities	2.82
Dues & professional fees	0.19
Interest	9.14
Mach & bldg depreciation	23.96
Miscellaneous	4.66
Total overhead expenses per acre	55.24
Total dir & ovhd expenses per acre	275.37
Net return per acre	128.74
Government payments	15.74
Net return with govt pmts	144.48
Labor & management charge	24.40
Net return over lbr & mgt	120.08
Cost of Production	
Total direct expense per cwt.	13.04
Total dir & ovhd exp per cwt.	16.31
Less govt & other income	13.85
With labor & management	15.29
Net value per unit	22.40
Machinery cost per acre	65.34
Est. labor hours per acre	1.21

Crop Enterprise Analysis
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Net Return)

Canola on Cash Rent

	Avg. Of All Farms
Number of fields	17
Number of farms	12
Acres	162.97
Yield per acre (cwt.)	14.49
Operators share of yield %	100.00
Value per cwt.	22.44
Total product return per acre	325.03
Crop insurance per acre	69.73
Gross return per acre	394.76
Direct Expenses	
Seed	52.89
Fertilizer	80.49
Crop chemicals	19.60
Crop insurance	16.72
Fuel & oil	20.72
Repairs	20.85
Custom hire	5.91
Land rent	40.61
Operating interest	2.25
Miscellaneous	0.55
Total direct expenses per acre	260.60
Return over direct exp per acre	134.16
Overhead Expenses	
Hired labor	5.79
Farm insurance	2.95
Utilities	2.06
Dues & professional fees	0.46
Interest	2.61
Mach & bldg depreciation	23.90
Miscellaneous	5.06
Total overhead expenses per acre	42.82
Total dir & ovhd expenses per acre	303.42
Net return per acre	91.34
Government payments	11.91
Net return with govt pmts	103.25
Labor & management charge	23.53
Net return over lbr & mgt	79.72
Cost of Production	
Total direct expense per cwt.	17.99
Total dir & ovhd exp per cwt.	20.95
Less govt & other income	15.31
With labor & management	16.94
Net value per unit	22.44
Machinery cost per acre	72.49
Est. labor hours per acre	1.09

Crop Enterprise Analysis
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Net Return)

Corn on Owned Land

	Avg. Of All Farms	*Low 20%*	*40 - 60%*	*High 20%*
Number of fields	44	8	10	9
Number of farms	42	8	9	9
Acres	123.75	130.63	88.97	189.73
Yield per acre (bu.)	106.54	81.61	100.60	148.12
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	5.69	5.19	5.66	5.94
Total product return per acre	605.67	423.58	569.23	879.57
Crop insurance per acre	33.53	12.32	4.03	23.97
Gross return per acre	639.20	435.89	573.26	903.55
Direct Expenses				
Seed	73.28	74.99	74.32	73.95
Fertilizer	102.36	129.79	90.88	105.10
Crop chemicals	16.51	18.06	11.88	18.84
Crop insurance	25.50	26.37	34.49	19.69
Drying expense	2.60	0.24	5.05	2.51
Fuel & oil	28.87	35.78	29.51	28.00
Repairs	31.34	41.46	39.42	23.58
Custom hire	10.68	17.00	8.55	5.05
Operating interest	6.76	6.72	11.06	4.16
Miscellaneous	0.33	-	1.55	0.25
Total direct expenses per acre	298.22	350.41	306.72	281.12
Return over direct exp per acre	340.98	85.48	266.54	622.42
Overhead Expenses				
Hired labor	7.77	9.30	13.44	8.38
Machinery leases	2.08	0.41	2.87	0.91
RE & pers. property taxes	5.96	6.95	5.68	5.65
Farm insurance	4.09	4.15	4.09	4.45
Utilities	4.15	3.30	4.97	4.84
Dues & professional fees	0.79	1.10	1.07	0.10
Interest	20.01	15.78	20.29	17.86
Mach & bldg depreciation	32.18	39.63	36.52	32.32
Miscellaneous	5.81	5.33	3.49	8.92
Total overhead expenses per acre	82.84	85.95	92.42	83.45
Total dir & ovhd expenses per acre	381.06	436.36	399.14	364.57
Net return per acre	258.14	-0.47	174.12	538.98
Government payments	13.44	12.01	11.35	15.47
Net return with govt pmts	271.57	11.54	185.47	554.44
Labor & management charge	44.30	49.07	40.48	52.52
Net return over lbr & mgt	227.28	-37.53	144.98	501.92
Cost of Production				
Total direct expense per bu.	2.80	4.29	3.05	1.90
Total dir & ovhd exp per bu.	3.58	5.35	3.97	2.46
Less govt & other income	3.14	5.05	3.81	2.20
With labor & management	3.55	5.65	4.22	2.55
Net value per unit	5.69	5.19	5.66	5.94
Machinery cost per acre	106.80	135.18	119.65	90.05
Est. labor hours per acre	2.12	2.66	2.15	2.03

Crop Enterprise Analysis
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Net Return)

Corn on Cash Rent

	Avg. Of All Farms	*Low 20%*	*40 - 60%*	*High 20%*
Number of fields	60	11	14	11
Number of farms	47	9	10	10
Acres	296.97	391.97	241.86	429.76
Yield per acre (bu.)	110.06	92.79	109.57	134.54
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	5.59	5.00	5.58	5.92
Other product return per acre	0.22	0.93	-	-
Total product return per acre	615.11	464.52	611.61	796.67
Crop insurance per acre	16.44	30.75	7.90	14.08
Other crop income per acre	0.25	1.04	-	-
Gross return per acre	631.80	496.31	619.51	810.74
Direct Expenses				
Seed	73.10	69.82	69.50	69.11
Fertilizer	96.09	103.43	112.15	86.95
Crop chemicals	19.29	22.62	22.96	16.42
Crop insurance	22.97	21.76	30.48	21.16
Drying expense	3.98	0.34	14.77	2.60
Fuel & oil	31.01	39.49	27.58	27.67
Repairs	35.70	48.22	31.75	20.84
Custom hire	9.93	11.95	10.81	8.42
Land rent	54.19	52.55	46.58	54.21
Operating interest	5.73	3.33	3.65	3.87
Miscellaneous	0.67	-	3.41	-
Total direct expenses per acre	352.66	373.50	373.64	311.26
Return over direct exp per acre	279.14	122.81	245.87	499.49
Overhead Expenses				
Hired labor	12.93	22.62	5.91	6.72
Machinery leases	4.79	0.28	9.95	5.71
Building leases	0.23	0.00	0.71	0.03
Farm insurance	3.80	3.66	3.13	3.42
Utilities	2.86	3.60	2.55	2.71
Dues & professional fees	1.06	2.14	0.67	0.62
Interest	2.99	3.62	3.08	1.60
Mach & bldg depreciation	35.24	45.07	32.45	30.28
Miscellaneous	5.07	4.13	3.69	5.31
Total overhead expenses per acre	68.98	85.12	62.14	56.39
Total dir & ovhd expenses per acre	421.64	458.62	435.78	367.65
Net return per acre	210.17	37.69	183.72	443.09
Government payments	12.23	10.11	14.14	15.35
Net return with govt pmts	222.39	47.80	197.86	458.45
Labor & management charge	38.75	40.67	36.66	37.04
Net return over lbr & mgt	183.65	7.13	161.20	421.41
Cost of Production				
Total direct expense per bu.	3.20	4.03	3.41	2.31
Total dir & ovhd exp per bu.	3.83	4.94	3.98	2.73
Less govt & other income	3.57	4.48	3.78	2.51
With labor & management	3.92	4.92	4.11	2.79
Net value per unit	5.59	5.00	5.58	5.92
Machinery cost per acre	116.94	146.43	112.78	91.51
Est. labor hours per acre	1.75	2.10	1.71	1.52

Crop Enterprise Analysis
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Net Return)

Corn Silage on Cash Rent

	Avg. Of All Farms
Number of fields	10
Number of farms	10
Acres	48.93
Yield per acre (ton)	12.63
Operators share of yield %	100.00
Value per ton	35.83
Total product return per acre	452.58
Gross return per acre	452.58
Direct Expenses	
Seed	66.81
Fertilizer	82.79
Crop chemicals	11.73
Crop insurance	11.17
Fuel & oil	28.17
Repairs	28.75
Custom hire	44.36
Land rent	47.86
Operating interest	3.57
Miscellaneous	1.22
Total direct expenses per acre	326.42
Return over direct exp per acre	126.15
Overhead Expenses	
Hired labor	3.95
Machinery leases	2.13
Farm insurance	3.31
Utilities	2.86
Interest	3.10
Mach & bldg depreciation	28.53
Miscellaneous	4.92
Total overhead expenses per acre	48.80
Total dir & ovhd expenses per acre	375.23
Net return per acre	77.35
Government payments	10.75
Net return with govt pmts	88.10
Labor & management charge	26.65
Net return over lbr & mgt	61.45
Cost of Production	
Total direct expense per ton	25.84
Total dir & ovhd exp per ton	29.70
Less govt & other income	28.85
With labor & management	30.96
Net value per unit	35.83
Machinery cost per acre	131.55
Est. labor hours per acre	1.88

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

CRP on Owned Land

	Avg. Of All Farms
Number of fields	23
Number of farms	21
Acres	244.83
Yield per acre ($)	40.92
Operators share of yield %	100.00
Value per $	1.00
Total product return per acre	40.92
Gross return per acre	40.92
Direct Expenses	
Fuel & oil	1.10
Repairs	1.00
Custom hire	0.59
Total direct expenses per acre	2.86
Return over direct exp per acre	38.06
Overhead Expenses	
Hired labor	0.35
Building leases	0.38
RE & pers. property taxes	5.03
Farm insurance	1.28
Dues & professional fees	0.09
Interest	7.60
Mach & bldg depreciation	1.95
Miscellaneous	0.59
Total overhead expenses per acre	17.26
Total dir & ovhd expenses per acre	20.12
Net return per acre	20.80

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

Hay, Alfalfa on Owned Land

	Avg. Of All Farms
Number of fields	19
Number of farms	17
Acres	60.33
Yield per acre (ton)	2.42
Operators share of yield %	100.00
Value per ton	49.35
Other product return per acre	0.35
Total product return per acre	119.58
Gross return per acre	119.58
Direct Expenses	
Fertilizer	1.41
Crop insurance	1.60
Fuel & oil	18.52
Repairs	21.15
Custom hire	0.61
Operating interest	2.30
Miscellaneous	2.04
Total direct expenses per acre	47.64
Return over direct exp per acre	71.95
Overhead Expenses	
Hired labor	4.34
Machinery leases	0.38
Building leases	0.05
RE & pers. property taxes	5.23
Farm insurance	2.67
Utilities	2.04
Dues & professional fees	0.28
Interest	11.65
Mach & bldg depreciation	16.06
Miscellaneous	0.85
Total overhead expenses per acre	43.55
Total dir & ovhd expenses per acre	91.19
Net return per acre	28.39
Government payments	7.88
Net return with govt pmts	36.28
Labor & management charge	20.29
Net return over lbr & mgt	15.99
Cost of Production	
Total direct expense per ton	19.72
Total dir & ovhd exp per ton	37.74
Less govt & other income	34.34
With labor & management	42.73
Net value per unit	49.35
Machinery cost per acre	58.67
Est. labor hours per acre	1.36

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

Hay, Alfalfa on Cash Rent

	Avg. Of All Farms
Number of fields	12
Number of farms	12
Acres	78.68
Yield per acre (ton)	2.99
Operators share of yield %	100.00
Value per ton	65.31
Total product return per acre	195.20
Gross return per acre	195.20
Direct Expenses	
Seed	1.69
Fertilizer	7.21
Crop insurance	1.34
Fuel & oil	20.37
Repairs	22.30
Custom hire	1.85
Land rent	39.34
Operating interest	3.23
Miscellaneous	1.77
Total direct expenses per acre	99.11
Return over direct exp per acre	96.09
Overhead Expenses	
Hired labor	5.37
Machinery leases	4.12
Farm insurance	3.07
Utilities	2.55
Dues & professional fees	0.44
Interest	1.71
Mach & bldg depreciation	24.19
Miscellaneous	1.88
Total overhead expenses per acre	43.32
Total dir & ovhd expenses per acre	142.44
Net return per acre	52.77
Government payments	11.59
Net return with govt pmts	64.35
Labor & management charge	24.74
Net return over lbr & mgt	39.61
Cost of Production	
Total direct expense per ton	33.16
Total dir & ovhd exp per ton	47.65
Less govt & other income	43.78
With labor & management	52.06
Net value per unit	65.31
Machinery cost per acre	72.85
Est. labor hours per acre	1.55

Crop Enterprise Analysis
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Net Return)

Hay, Grass on Owned Land

	Avg. Of All Farms
Number of fields	11
Number of farms	10
Acres	104.29
Yield per acre (ton)	1.12
Operators share of yield %	100.00
Value per ton	37.80
Other product return per acre	0.70
Total product return per acre	43.21
Gross return per acre	43.21
Direct Expenses	
Crop insurance	0.51
Fuel & oil	11.08
Repairs	12.11
Operating interest	1.44
Miscellaneous	1.01
Total direct expenses per acre	26.14
Return over direct exp per acre	17.07
Overhead Expenses	
Hired labor	4.30
RE & pers. property taxes	2.17
Farm insurance	0.70
Utilities	0.92
Interest	2.41
Mach & bldg depreciation	11.25
Miscellaneous	2.17
Total overhead expenses per acre	23.92
Total dir & ovhd expenses per acre	50.06
Net return per acre	-6.85
Government payments	-
Net return with govt pmts	-6.85
Labor & management charge	11.07
Net return over lbr & mgt	-17.92
Cost of Production	
Total direct expense per ton	23.24
Total dir & ovhd exp per ton	44.50
Less govt & other income	43.88
With labor & management	53.73
Net value per unit	37.80
Machinery cost per acre	34.12
Est. labor hours per acre	0.94

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

Hay, Grass on Cash Rent

	Avg. Of All Farms
Number of fields	15
Number of farms	11
Acres	169.58
Yield per acre (ton)	1.52
Operators share of yield %	100.00
Value per ton	39.88
Total product return per acre	60.63
Gross return per acre	60.63
Direct Expenses	
Fuel & oil	13.14
Repairs	16.75
Land rent	18.09
Operating interest	1.84
Miscellaneous	2.53
Total direct expenses per acre	52.34
Return over direct exp per acre	8.29
Overhead Expenses	
Hired labor	6.63
Machinery leases	0.68
Farm insurance	0.77
Utilities	1.02
Dues & professional fees	0.29
Interest	0.89
Mach & bldg depreciation	13.07
Miscellaneous	2.46
Total overhead expenses per acre	25.82
Total dir & ovhd expenses per acre	78.15
Net return per acre	-17.53
Government payments	-
Net return with govt pmts	-17.53
Labor & management charge	11.59
Net return over lbr & mgt	-29.12
Cost of Production	
Total direct expense per ton	34.43
Total dir & ovhd exp per ton	51.41
Less govt & other income	51.41
With labor & management	59.04
Net value per unit	39.88
Machinery cost per acre	43.66
Est. labor hours per acre	1.08

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

Hay, Mixed Alfalfa/Grass on Owned Land

	Avg. Of All Farms
Number of fields	12
Number of farms	10
Acres	138.15
Yield per acre (ton)	2.48
Operators share of yield %	100.00
Value per ton	50.02
Total product return per acre	123.95
Gross return per acre	123.95
Direct Expenses	
Crop insurance	1.79
Fuel & oil	13.98
Repairs	14.31
Custom hire	2.32
Operating interest	1.29
Miscellaneous	1.05
Total direct expenses per acre	34.74
Return over direct exp per acre	89.21
Overhead Expenses	
Hired labor	6.22
RE & pers. property taxes	4.27
Farm insurance	2.85
Utilities	2.58
Interest	10.25
Mach & bldg depreciation	22.51
Miscellaneous	2.80
Total overhead expenses per acre	51.48
Total dir & ovhd expenses per acre	86.23
Net return per acre	37.72
Government payments	8.33
Net return with govt pmts	46.06
Labor & management charge	17.46
Net return over lbr & mgt	28.60
Cost of Production	
Total direct expense per ton	14.02
Total dir & ovhd exp per ton	34.80
Less govt & other income	31.44
With labor & management	38.48
Net value per unit	50.02
Machinery cost per acre	53.86
Est. labor hours per acre	1.39

Crop Enterprise Analysis
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Net Return)

Hay, Mixed Alfalfa/Grass on Cash Rent

	Avg. Of All Farms
Number of fields	19
Number of farms	15
Acres	214.01
Yield per acre (ton)	1.99
Operators share of yield %	100.00
Value per ton	46.11
Total product return per acre	91.84
Gross return per acre	91.84
Direct Expenses	
Crop insurance	0.69
Fuel & oil	12.90
Repairs	11.98
Custom hire	4.02
Land rent	16.11
Operating interest	3.07
Miscellaneous	0.28
Total direct expenses per acre	49.05
Return over direct exp per acre	42.78
Overhead Expenses	
Hired labor	2.25
Farm insurance	2.52
Utilities	1.76
Interest	2.13
Mach & bldg depreciation	14.94
Miscellaneous	3.96
Total overhead expenses per acre	27.55
Total dir & ovhd expenses per acre	76.61
Net return per acre	15.23
Government payments	3.58
Net return with govt pmts	18.81
Labor & management charge	14.97
Net return over lbr & mgt	3.85
Cost of Production	
Total direct expense per ton	24.63
Total dir & ovhd exp per ton	38.46
Less govt & other income	36.66
With labor & management	44.18
Net value per unit	46.11
Machinery cost per acre	45.28
Est. labor hours per acre	1.12

Crop Enterprise Analysis
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Net Return)

Pasture on Owned Land

	Avg. Of All Farms	*Low 20%*	*40 - 60%*	*High 20%*
Number of fields	36	6	7	9
Number of farms	34	6	7	7
Acres	417.42	252.50	639.36	548.74
Yield per acre (aum)	1.04	0.85	0.94	1.30
Operators share of yield %	100.00	100.00	100.00	100.00
Value per aum	19.66	20.22	18.57	20.81
Total product return per acre	20.49	17.25	17.50	26.98
Gross return per acre	20.49	17.25	17.50	26.98
Direct Expenses				
Crop chemicals	0.12	0.99	-	-
Fuel & oil	0.70	1.44	0.60	0.60
Repairs	0.78	1.83	0.58	0.79
Total direct expenses per acre	1.73	4.49	1.39	1.47
Return over direct exp per acre	18.76	12.76	16.11	25.51
Overhead Expenses				
Hired labor	0.29	1.01	0.21	0.27
RE & pers. property taxes	2.05	2.42	2.11	1.81
Interest	4.14	11.97	5.29	1.82
Mach & bldg depreciation	0.90	1.10	0.94	0.92
Miscellaneous	0.82	1.40	0.43	1.11
Total overhead expenses per acre	8.21	17.89	8.98	5.93
Total dir & ovhd expenses per acre	9.94	22.38	10.37	7.40
Net return per acre	10.55	-5.13	7.13	19.58

Crop Enterprise Analysis
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Net Return)

Pasture on Cash Rent

	Avg. Of All Farms	*Low 20%*	*40 - 60%*	*High 20%*
Number of fields	62	11	11	20
Number of farms	48	9	9	10
Acres	765.64	561.87	914.13	437.48
Yield per acre (aum)	0.93	0.85	0.95	1.16
Operators share of yield %	100.00	100.00	100.00	100.00
Value per aum	18.77	17.90	15.91	21.59
Total product return per acre	17.46	15.24	15.17	25.03
Gross return per acre	17.46	15.24	15.17	25.03
Direct Expenses				
Fuel & oil	0.66	0.73	0.46	0.81
Repairs	0.73	0.85	0.58	0.97
Land rent	12.88	17.47	12.60	11.18
Total direct expenses per acre	14.52	19.78	13.80	12.99
Return over direct exp per acre	2.94	-4.53	1.37	12.04
Overhead Expenses				
Farm insurance	0.16	0.52	0.03	0.11
Mach & bldg depreciation	0.69	0.63	0.43	0.84
Miscellaneous	0.71	1.39	0.42	0.76
Total overhead expenses per acre	1.56	2.54	0.88	1.72
Total dir & ovhd expenses per acre	16.08	22.32	14.68	14.71
Net return per acre	1.38	-7.08	0.49	10.32

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

Prevented planting on Owned Land

	Avg. Of All Farms	*Low 20%*	*40 - 60%*	*High 20%*
Number of fields	62	11	15	10
Number of farms	48	9	9	10
Acres	101.46	124.89	136.89	109.54
Yield per acre	-	-	-	-
Operators share of yield %	-	-	-	-
Value per $	-	-	-	-
Total product return per acre	-	-	-	-
Crop insurance per acre	201.37	146.70	180.51	322.18
Other crop income per acre	0.60	-	1.84	-
Gross return per acre	201.97	146.70	182.36	322.18
Direct Expenses				
Seed	0.17	-	-	0.97
Crop chemicals	5.04	9.63	2.51	6.59
Crop insurance	18.36	16.81	17.38	24.10
Fuel & oil	5.64	5.71	3.78	9.71
Repairs	6.25	6.01	4.91	10.21
Custom hire	1.22	1.18	0.75	0.57
Operating interest	1.33	1.83	0.80	2.02
Total direct expenses per acre	38.01	41.17	30.13	54.18
Return over direct exp per acre	163.96	105.53	152.23	268.00
Overhead Expenses				
Hired labor	2.20	2.36	1.37	4.68
Machinery leases	0.59	0.31	0.27	2.45
RE & pers. property taxes	6.74	8.35	5.43	7.36
Farm insurance	4.02	6.87	2.51	3.48
Utilities	3.01	5.08	2.14	3.11
Dues & professional fees	0.75	0.82	0.45	1.09
Interest	19.48	26.46	17.34	21.04
Mach & bldg depreciation	6.31	5.60	6.73	9.29
Miscellaneous	5.39	7.71	4.35	4.62
Total overhead expenses per acre	48.50	63.56	40.58	57.13
Total dir & ovhd expenses per acre	86.51	104.72	70.70	111.31
Net return per acre	115.46	41.98	111.65	210.87
Government payments	11.98	11.98	9.57	15.06
Net return with govt pmts	127.44	53.95	121.22	225.93
Labor & management charge	7.95	9.81	5.45	13.80
Net return over lbr & mgt	119.50	44.15	115.77	212.13

Crop Enterprise Analysis
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Net Return)

Prevented planting on Cash Rent

	Avg. Of All Farms	*Low 20%*	*40 - 60%*	*High 20%*
Number of fields	107	22	28	16
Number of farms	72	14	15	15
Acres	183.61	96.64	140.62	402.57
Yield per acre	-	-	-	-
Operators share of yield %	-	-	-	-
Value per $	-	-	-	-
Total product return per acre	-	-	-	-
Crop insurance per acre	219.45	117.01	193.21	297.44
Other crop income per acre	0.09	-	-	-
Gross return per acre	219.55	117.01	193.21	297.44
Direct Expenses				
Fertilizer	1.90	-	-	5.81
Crop chemicals	5.30	1.71	1.16	10.30
Crop insurance	18.56	14.06	16.06	22.17
Fuel & oil	5.41	4.66	4.70	7.37
Repairs	5.98	5.43	5.99	7.15
Custom hire	0.84	0.27	0.40	0.73
Land rent	53.81	54.17	53.08	53.95
Operating interest	1.04	1.06	0.81	1.49
Total direct expenses per acre	92.97	81.36	82.20	109.38
Return over direct exp per acre	126.57	35.64	111.01	188.06
Overhead Expenses				
Hired labor	2.33	0.82	1.86	4.56
Machinery leases	0.75	1.47	0.16	0.52
Building leases	0.14	0.51	0.11	0.15
Farm insurance	3.37	3.75	3.92	3.18
Utilities	2.54	2.07	1.64	3.79
Dues & professional fees	0.89	0.48	1.13	1.25
Interest	3.21	1.53	3.42	3.68
Mach & bldg depreciation	6.59	4.00	5.49	9.17
Miscellaneous	4.79	4.19	5.38	4.63
Total overhead expenses per acre	24.61	18.82	23.11	30.92
Total dir & ovhd expenses per acre	117.58	100.18	105.31	140.31
Net return per acre	101.97	16.83	87.90	157.13
Government payments	12.19	7.31	10.52	14.50
Net return with govt pmts	114.15	24.14	98.42	171.64
Labor & management charge	7.58	5.80	5.97	11.27
Net return over lbr & mgt	106.57	18.34	92.45	160.36

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

Soybeans on Owned Land

	Avg. Of All Farms	*Low 20%*	*40 - 60%*	*High 20%*
Number of fields	56	10	10	9
Number of farms	44	8	9	9
Acres	286.44	340.79	306.70	316.90
Yield per acre (bu.)	28.15	22.53	28.03	36.31
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	11.35	11.32	11.63	11.36
Total product return per acre	319.61	255.02	326.09	412.62
Crop insurance per acre	50.25	39.33	34.65	46.84
Other crop income per acre	0.47	-	2.44	-
Gross return per acre	370.33	294.34	363.18	459.47
Direct Expenses				
Seed	58.10	68.06	53.82	54.07
Fertilizer	16.24	17.21	20.63	20.90
Crop chemicals	18.07	16.77	24.26	16.97
Crop insurance	23.78	26.64	22.23	23.00
Fuel & oil	17.28	13.77	20.10	19.11
Repairs	20.73	18.34	23.63	20.20
Custom hire	7.03	6.80	9.23	6.68
Operating interest	4.65	7.14	2.17	2.15
Total direct expenses per acre	165.95	174.72	176.37	163.14
Return over direct exp per acre	204.38	119.63	186.81	296.33
Overhead Expenses				
Hired labor	5.47	9.59	6.80	3.50
Machinery leases	1.52	1.31	0.53	0.50
RE & pers. property taxes	6.64	5.57	5.56	6.02
Farm insurance	5.01	4.68	4.13	4.47
Utilities	2.97	2.72	3.67	3.40
Dues & professional fees	0.57	0.73	0.63	0.39
Interest	22.30	29.77	8.13	16.19
Mach & bldg depreciation	25.23	20.56	31.38	25.74
Miscellaneous	6.28	5.64	4.44	7.44
Total overhead expenses per acre	75.99	80.58	65.28	67.66
Total dir & ovhd expenses per acre	241.94	255.29	241.65	230.79
Net return per acre	128.39	39.05	121.53	228.67
Government payments	11.17	12.06	8.89	13.78
Net return with govt pmts	139.56	51.11	130.42	242.45
Labor & management charge	26.15	21.89	29.06	30.55
Net return over lbr & mgt	113.41	29.22	101.36	211.90
Cost of Production				
Total direct expense per bu.	5.89	7.75	6.29	4.49
Total dir & ovhd exp per bu.	8.59	11.33	8.62	6.36
Less govt & other income	6.40	9.05	6.98	4.69
With labor & management	7.32	10.02	8.02	5.53
Net value per unit	11.35	11.32	11.63	11.36
Machinery cost per acre	74.03	67.54	86.12	73.11
Est. labor hours per acre	1.20	1.16	1.29	1.17

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

Soybeans on Cash Rent

	Avg. Of All Farms	*Low 20%*	*40 - 60%*	*High 20%*
Number of fields	100	13	26	17
Number of farms	60	12	12	12
Acres	407.86	482.55	354.07	368.85
Yield per acre (bu.)	28.79	24.41	28.66	32.91
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	11.36	10.85	11.83	11.56
Total product return per acre	326.94	264.77	339.03	380.32
Hedging gains/losses per acre	0.09	-	0.39	-
Crop insurance per acre	29.53	11.90	27.53	61.93
Other crop income per acre	0.10	-	0.46	-
Gross return per acre	356.67	276.67	367.42	442.25
Direct Expenses				
Seed	54.29	56.84	50.57	50.91
Fertilizer	16.39	17.73	24.99	12.46
Crop chemicals	17.19	14.20	20.32	17.98
Crop insurance	21.41	18.77	25.98	22.57
Fuel & oil	18.93	19.72	20.18	19.40
Repairs	21.02	25.94	22.02	19.91
Custom hire	8.13	12.70	6.05	4.08
Land rent	53.32	54.04	55.00	52.40
Operating interest	3.23	5.50	3.19	1.25
Total direct expenses per acre	213.93	225.43	228.30	201.06
Return over direct exp per acre	142.74	51.24	139.11	241.19
Overhead Expenses				
Hired labor	7.68	10.45	8.15	4.54
Machinery leases	2.25	3.48	1.43	0.21
Farm insurance	3.94	4.44	3.68	3.80
Utilities	2.51	1.89	2.46	2.20
Dues & professional fees	0.98	0.75	1.05	0.66
Interest	3.19	5.23	3.60	1.15
Mach & bldg depreciation	23.95	17.97	25.38	22.25
Miscellaneous	5.17	4.67	4.93	5.63
Total overhead expenses per acre	49.67	48.88	50.69	40.44
Total dir & ovhd expenses per acre	263.60	274.31	278.99	241.50
Net return per acre	93.07	2.37	88.42	200.75
Government payments	10.75	9.89	9.22	14.17
Net return with govt pmts	103.81	12.25	97.64	214.93
Labor & management charge	25.47	23.44	29.56	26.21
Net return over lbr & mgt	78.34	-11.18	68.09	188.72
Cost of Production				
Total direct expense per bu.	7.43	9.24	7.97	6.11
Total dir & ovhd exp per bu.	9.16	11.24	9.74	7.34
Less govt & other income	7.75	10.35	8.42	5.03
With labor & management	8.63	11.31	9.45	5.82
Net value per unit	11.36	10.85	11.84	11.56
Machinery cost per acre	75.81	83.25	76.82	65.77
Est. labor hours per acre	1.12	1.11	1.02	1.09

Crop Enterprise Analysis
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Net Return)

Soybeans on Share Rent

	Avg. Of All Farms
Number of fields	14
Number of farms	9
Acres	237.99
Yield per acre (bu.)	28.28
Operators share of yield %	67.34
Value per bu.	11.34
Total product return per acre	215.87
Crop insurance per acre	17.70
Gross return per acre	233.57
Direct Expenses	
Seed	58.11
Fertilizer	13.21
Crop chemicals	16.81
Crop insurance	19.71
Fuel & oil	19.65
Repairs	21.45
Custom hire	2.20
Operating interest	5.70
Total direct expenses per acre	156.83
Return over direct exp per acre	76.74
Overhead Expenses	
Hired labor	7.61
Machinery leases	1.06
Farm insurance	3.32
Utilities	2.75
Dues & professional fees	1.03
Interest	5.64
Mach & bldg depreciation	20.29
Miscellaneous	4.24
Total overhead expenses per acre	45.95
Total dir & ovhd expenses per acre	202.78
Net return per acre	30.79
Government payments	5.69
Net return with govt pmts	36.48
Labor & management charge	25.12
Net return over lbr & mgt	11.36
Cost of Production	
Total direct expense per bu.	8.24
Total dir & ovhd exp per bu.	10.65
Less govt & other income	9.42
With labor & management	10.74
Net value per unit	11.34
Machinery cost per acre	69.77
Est. labor hours per acre	1.29

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

Sunflowers on Owned Land

	Avg. Of All Farms
Number of fields	15
Number of farms	14
Acres	231.11
Yield per acre (cwt.)	14.32
Operators share of yield %	100.00
Value per cwt.	28.36
Total product return per acre	406.21
Crop insurance per acre	18.28
Gross return per acre	424.50
Direct Expenses	
Seed	35.69
Fertilizer	56.01
Crop chemicals	49.04
Crop insurance	13.95
Drying expense	1.11
Fuel & oil	20.64
Repairs	17.28
Custom hire	14.12
Operating interest	1.51
Miscellaneous	0.15
Total direct expenses per acre	209.50
Return over direct exp per acre	215.00
Overhead Expenses	
Hired labor	6.92
Machinery leases	0.45
RE & pers. property taxes	4.68
Farm insurance	2.78
Utilities	2.79
Dues & professional fees	0.40
Interest	6.95
Mach & bldg depreciation	27.73
Miscellaneous	6.92
Total overhead expenses per acre	59.63
Total dir & ovhd expenses per acre	269.13
Net return per acre	155.37
Government payments	14.18
Net return with govt pmts	169.55
Labor & management charge	27.20
Net return over lbr & mgt	142.35
Cost of Production	
Total direct expense per cwt.	14.62
Total dir & ovhd exp per cwt.	18.79
Less govt & other income	16.52
With labor & management	18.42
Net value per unit	28.36
Machinery cost per acre	79.45
Est. labor hours per acre	1.28

Crop Enterprise Analysis
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Net Return)

Sunflowers on Cash Rent

	Avg. Of All Farms
Number of fields	29
Number of farms	16
Acres	173.82
Yield per acre (cwt.)	11.85
Operators share of yield %	100.00
Value per cwt.	29.07
Total product return per acre	344.55
Crop insurance per acre	36.78
Gross return per acre	381.33
Direct Expenses	
Seed	36.21
Fertilizer	55.02
Crop chemicals	53.03
Crop insurance	19.77
Fuel & oil	20.11
Repairs	21.34
Custom hire	9.59
Land rent	36.22
Operating interest	3.29
Miscellaneous	0.59
Total direct expenses per acre	255.18
Return over direct exp per acre	126.15
Overhead Expenses	
Hired labor	5.21
Machinery leases	0.77
Farm insurance	2.19
Utilities	2.69
Interest	2.02
Mach & bldg depreciation	23.45
Miscellaneous	5.09
Total overhead expenses per acre	41.42
Total dir & ovhd expenses per acre	296.60
Net return per acre	84.73
Government payments	16.17
Net return with govt pmts	100.90
Labor & management charge	25.10
Net return over lbr & mgt	75.80
Cost of Production	
Total direct expense per cwt.	21.53
Total dir & ovhd exp per cwt.	25.03
Less govt & other income	20.56
With labor & management	22.68
Net value per unit	29.07
Machinery cost per acre	75.15
Est. labor hours per acre	1.26

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

Wheat, Spring on Owned Land

	Avg. Of All Farms	*Low 20%*	*40 - 60%*	*High 20%*
Number of fields	64	12	11	17
Number of farms	48	9	9	10
Acres	230.12	148.70	260.06	212.85
Yield per acre (bu.)	32.22	25.67	30.65	39.21
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	8.19	8.07	7.94	8.50
Total product return per acre	263.92	207.14	243.32	333.36
Crop insurance per acre	49.44	33.75	46.46	49.83
Other crop income per acre	0.42	-	-	-
Gross return per acre	313.78	240.89	289.78	383.19
Direct Expenses				
Seed	22.63	23.22	23.83	22.12
Fertilizer	70.41	73.73	78.44	55.73
Crop chemicals	29.25	27.70	37.18	24.75
Crop insurance	20.83	25.06	19.57	20.56
Drying expense	0.24	0.98	0.50	-
Storage	0.26	-	1.30	0.03
Fuel & oil	17.87	17.94	17.74	19.04
Repairs	20.03	25.83	22.53	20.40
Custom hire	11.98	10.78	6.92	6.19
Operating interest	3.47	4.28	3.58	4.08
Miscellaneous	0.19	-	-	-
Total direct expenses per acre	197.16	209.52	211.60	172.90
Return over direct exp per acre	116.61	31.37	78.18	210.29
Overhead Expenses				
Hired labor	6.23	4.34	4.59	8.96
Machinery leases	0.84	0.39	0.79	0.53
Building leases	0.23	0.51	-	0.44
RE & pers. property taxes	5.89	5.68	4.83	6.35
Farm insurance	3.67	4.05	3.41	3.81
Utilities	2.58	2.75	2.70	1.81
Dues & professional fees	0.62	0.67	0.82	1.07
Interest	15.50	24.70	10.17	11.48
Mach & bldg depreciation	23.59	22.58	22.66	26.56
Miscellaneous	5.42	6.66	3.32	7.66
Total overhead expenses per acre	64.56	72.34	53.29	68.67
Total dir & ovhd expenses per acre	261.72	281.86	264.89	241.57
Net return per acre	52.05	-40.97	24.89	141.62
Government payments	13.53	13.96	10.44	14.28
Net return with govt pmts	65.58	-27.01	35.34	155.89
Labor & management charge	25.35	20.80	25.36	26.11
Net return over lbr & mgt	40.23	-47.82	9.98	129.79
Cost of Production				
Total direct expense per bu.	6.12	8.16	6.90	4.41
Total dir & ovhd exp per bu.	8.12	10.98	8.64	6.16
Less govt & other income	6.16	9.12	6.79	4.53
With labor & management	6.94	9.93	7.61	5.19
Net value per unit	8.19	8.07	7.94	8.50
Machinery cost per acre	75.07	79.50	70.64	73.33
Est. labor hours per acre	1.18	1.03	1.06	1.22

Crop Enterprise Analysis
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Net Return)

Wheat, Spring on Cash Rent

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of fields	118	20	19	35
Number of farms	63	12	12	13
Acres	336.86	378.16	443.87	203.51
Yield per acre (bu.)	32.17	26.30	29.61	40.40
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	8.10	7.78	7.74	8.68
Total product return per acre	260.62	204.69	229.28	350.46
Hedging gains/losses per acre	0.08	-	-	-
Crop insurance per acre	50.99	36.37	69.29	30.09
Other crop income per acre	0.76	-	3.19	-
Gross return per acre	312.44	241.06	301.77	380.55
Direct Expenses				
Seed	21.69	25.19	22.21	20.10
Fertilizer	78.00	66.80	82.57	65.48
Crop chemicals	32.51	32.85	28.03	26.54
Crop insurance	18.87	18.17	18.09	20.77
Fuel & oil	18.39	18.28	18.92	18.18
Repairs	21.26	26.07	21.29	24.27
Custom hire	7.66	10.21	8.28	8.03
Land rent	46.58	53.35	46.83	46.18
Operating interest	2.91	3.50	1.65	3.99
Miscellaneous	0.70	-	0.28	-
Total direct expenses per acre	248.56	254.42	248.14	233.54
Return over direct exp per acre	63.88	-13.35	53.62	147.01
Overhead Expenses				
Hired labor	6.94	7.36	7.30	9.88
Machinery leases	2.22	5.06	1.92	2.63
Farm insurance	3.60	3.99	3.29	3.46
Utilities	2.67	2.00	2.34	3.33
Dues & professional fees	0.76	0.59	1.37	0.73
Interest	2.65	4.21	2.34	1.29
Mach & bldg depreciation	23.15	25.45	20.74	18.96
Miscellaneous	5.17	4.62	4.82	5.40
Total overhead expenses per acre	47.15	53.28	44.12	45.68
Total dir & ovhd expenses per acre	295.72	307.70	292.27	279.22
Net return per acre	16.72	-66.64	9.50	101.33
Government payments	11.36	11.27	11.22	11.59
Net return with govt pmts	28.09	-55.37	20.72	112.92
Labor & management charge	24.07	22.07	22.35	28.28
Net return over lbr & mgt	4.02	-77.44	-1.63	84.64
Cost of Production				
Total direct expense per bu.	7.73	9.67	8.38	5.78
Total dir & ovhd exp per bu.	9.19	11.70	9.87	6.91
Less govt & other income	7.23	9.89	7.04	5.88
With labor & management	7.98	10.73	7.80	6.58
Net value per unit	8.10	7.78	7.74	8.68
Machinery cost per acre	73.37	87.52	71.80	71.66
Est. labor hours per acre	1.07	1.01	1.08	1.26

Crop Enterprise Analysis
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Net Return)

Wheat, Spring on Share Rent

	Avg. Of All Farms
Number of fields	18
Number of farms	12
Acres	173.00
Yield per acre (bu.)	30.57
Operators share of yield %	67.53
Value per bu.	8.17
Total product return per acre	168.60
Crop insurance per acre	27.78
Other crop income per acre	2.08
Gross return per acre	198.45
Direct Expenses	
Seed	20.75
Fertilizer	66.71
Crop chemicals	24.17
Crop insurance	18.22
Fuel & oil	17.92
Repairs	19.38
Custom hire	3.24
Operating interest	4.79
Total direct expenses per acre	175.18
Return over direct exp per acre	23.27
Overhead Expenses	
Hired labor	7.91
Machinery leases	0.78
Building leases	0.35
Farm insurance	3.45
Utilities	2.38
Dues & professional fees	0.85
Interest	3.96
Mach & bldg depreciation	21.11
Miscellaneous	4.22
Total overhead expenses per acre	45.01
Total dir & ovhd expenses per acre	220.19
Net return per acre	-21.73
Government payments	6.97
Net return with govt pmts	-14.76
Labor & management charge	22.33
Net return over lbr & mgt	-37.09
Cost of Production	
Total direct expense per bu.	8.49
Total dir & ovhd exp per bu.	10.67
Less govt & other income	8.88
With labor & management	9.96
Net value per unit	8.17
Machinery cost per acre	65.40
Est. labor hours per acre	1.13

Crop Enterprise Analysis
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Net Return)

Wheat, Winter on Owned Land

	Avg. Of All Farms
Number of fields	9
Number of farms	9
Acres	97.43
Yield per acre (bu.)	45.45
Operators share of yield %	100.00
Value per bu.	6.33
Total product return per acre	287.77
Crop insurance per acre	22.88
Gross return per acre	310.65
Direct Expenses	
Seed	17.92
Fertilizer	73.50
Crop chemicals	35.87
Crop insurance	20.82
Fuel & oil	15.61
Repairs	14.92
Custom hire	9.28
Machinery leases	1.03
Operating interest	2.26
Miscellaneous	0.99
Total direct expenses per acre	192.20
Return over direct exp per acre	118.45
Overhead Expenses	
Hired labor	4.83
Machinery leases	0.52
Building leases	1.26
RE & pers. property taxes	5.18
Farm insurance	3.37
Utilities	2.48
Interest	12.37
Mach & bldg depreciation	19.47
Miscellaneous	3.10
Total overhead expenses per acre	52.58
Total dir & ovhd expenses per acre	244.77
Net return per acre	65.87
Government payments	11.85
Net return with govt pmts	77.72
Labor & management charge	18.06
Net return over lbr & mgt	59.66
Cost of Production	
Total direct expense per bu.	4.23
Total dir & ovhd exp per bu.	5.39
Less govt & other income	4.62
With labor & management	5.02
Net value per unit	6.33
Machinery cost per acre	60.98
Est. labor hours per acre	1.30

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

Wheat, Winter on Cash Rent

	Avg. Of All Farms
Number of fields	14
Number of farms	14
Acres	170.25
Yield per acre (bu.)	44.78
Operators share of yield %	100.00
Value per bu.	6.46
Total product return per acre	289.33
Crop insurance per acre	14.78
Gross return per acre	304.12
Direct Expenses	
Seed	17.24
Fertilizer	64.85
Crop chemicals	33.96
Crop insurance	19.45
Fuel & oil	17.06
Repairs	16.78
Custom hire	11.54
Land rent	45.30
Operating interest	2.32
Miscellaneous	1.48
Total direct expenses per acre	229.97
Return over direct exp per acre	74.14
Overhead Expenses	
Hired labor	5.01
Machinery leases	0.52
Building leases	0.70
Farm insurance	2.84
Utilities	2.78
Dues & professional fees	0.38
Interest	2.00
Mach & bldg depreciation	19.35
Miscellaneous	3.61
Total overhead expenses per acre	37.19
Total dir & ovhd expenses per acre	267.16
Net return per acre	36.95
Government payments	15.10
Net return with govt pmts	52.06
Labor & management charge	20.43
Net return over lbr & mgt	31.63
Cost of Production	
Total direct expense per bu.	5.14
Total dir & ovhd exp per bu.	5.97
Less govt & other income	5.30
With labor & management	5.75
Net value per unit	6.46
Machinery cost per acre	66.04
Est. labor hours per acre	1.05

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
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(Farms Sorted By Net Return Per Unit)

Beef Cow-Calf -- Average Per Cwt. Produced

	Avg. Of All Farms		*Low 20%*		*40 - 60%*		*High 20%*	
Number of farms	41		8		8		9	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Beef Calves sold (lb)	32.84	48.57	25.61	40.53	51.00	72.71	36.66	53.62
Transferred out (lb)	67.16	102.61	74.39	115.18	49.00	83.69	63.34	91.58
Cull sales		22.94		25.16		21.42		20.49
Other income		1.70		5.56		1.32		0.19
Purchased		-27.89		-33.19		-21.87		-19.07
Transferred in		-18.63		-32.94		-10.15		-1.81
Inventory change		8.70		14.31		-5.99		-3.74
Gross margin		138.00		134.60		141.13		141.27
Direct Expenses								
Beet Pulp (dry) (lb.)	104.90	0.79	393.88	2.77	-	-	-	-
Protein Vit Minerals (lb.)	17.91	4.51	16.23	4.40	55.57	9.25	9.63	3.47
Complete Ration (lb.)	35.09	1.69	10.86	2.67	7.33	0.80	123.50	3.79
Corn Silage (lb.)	304.58	5.18	600.97	10.30	251.28	4.13	110.03	1.65
Hay, Alfalfa (lb.)	202.21	5.27	195.72	6.33	22.23	0.60	227.54	6.07
Hay, Grass (lb.)	1,010.48	20.48	1,153.18	22.80	1,175.83	24.25	884.19	17.64
Pasture (aum)	1.44	23.38	1.67	29.28	1.22	22.74	1.47	14.61
Other feed stuffs (lb)	85.35	4.19	178.81	8.72	124.21	2.17	16.97	2.49
Breeding fees		0.42		0.40		0.39		1.11
Veterinary		4.81		6.11		4.09		4.30
Supplies		2.66		2.15		1.30		3.43
Fuel & oil		5.37		8.51		5.59		3.51
Repairs		5.11		7.50		6.15		3.66
Custom hire		1.97		0.58		2.87		2.51
Livestock leases		0.75		1.90		1.47		0.28
Operating interest		1.37		1.98		2.99		0.37
Total direct expenses		87.94		116.40		88.79		68.89
Return over direct expense		50.06		18.20		52.35		72.38
Overhead Expenses								
Hired labor		2.66		4.85		1.17		3.20
Farm insurance		1.83		1.98		2.05		1.39
Utilities		1.65		1.94		1.01		1.70
Interest		2.45		2.50		2.72		1.53
Mach & bldg depreciation		6.73		4.06		7.18		7.08
Miscellaneous		3.34		3.84		2.69		3.05
Total overhead expenses		18.66		19.16		16.82		17.95
Total dir & ovhd expenses		106.60		135.57		105.61		86.84
Net return		31.40		-0.96		35.53		54.43
Labor & management charge		14.53		13.20		14.77		12.77
Net return over lbr & mgt		16.87		-14.16		20.76		41.67
Cost of Production Per Cwt. Produced								
Total direct expense per unit		87.94		116.40		88.79		68.89
Total dir& ovhd expense per unit		106.60		135.57		105.61		86.84
With other revenue adjustments		120.15		156.83		121.08		90.96
With labor and management		134.67		170.03		135.85		103.73
Est. labor hours per unit		1.08		1.35		1.11		0.87
Other Information								
Number of cows		156.7		216.1		103.5		155.3
Pregnancy percentage		96.9		93.4		98.8		99.2
Pregnancy loss percentage		1.1		1.1		1.4		0.3
Culling percentage		13.0		14.3		13.2		10.9
Calving percentage		95.9		92.3		97.4		98.8
Weaning percentage		86.8		79.8		90.7		93.0
Calves sold per cow		0.90		0.82		0.92		0.98
Calf death loss percent		9.7		16.2		6.5		5.3
Cow death loss percent		2.4		3.9		1.3		1.6
Average weaning weight		548		506		532		588
Lb. weaned/exposed female		476		404		482		547
Feed cost per cow		322.46		362.63		319.48		279.39
Avg wgt/ Beef Calves sold		579		495		621		633
Avg price / cwt.		147.90		158.24		142.56		146.26

Livestock Enterprise Analysis
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Net Return Per Unit)

Beef Cow-Calf -- Average Per Cow

	Avg. Of All Farms		*Low 20%*		*40 - 60%*		*High 20%*	
Number of farms	41		8		8		9	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Beef Calves sold (lb)	161.7	239.16	106.4	168.38	254.9	363.35	206.0	301.29
Transferred out (lb)	330.7	505.26	309.1	478.54	244.8	418.23	355.8	514.52
Cull sales		112.95		104.53		107.04		115.10
Other income		8.39		23.09		6.59		1.07
Purchased		-137.33		-137.91		-109.27		-107.13
Transferred in		-91.73		-136.84		-50.71		-10.16
Inventory change		42.86		59.46		-29.94		-20.99
Gross margin		679.56		559.26		705.28		793.71
Direct Expenses								
Beet Pulp (dry) (lb.)	516.5	3.89	1,636.5	11.51	-	-	-	-
Protein Vit Minerals (lb.)	88.2	22.22	67.4	18.29	277.7	46.23	54.1	19.51
Complete Ration (lb.)	172.8	8.31	45.1	11.11	36.6	3.98	693.9	21.32
Corn Silage (lb.)	1,499.8	25.50	2,496.9	42.80	1,255.7	20.65	618.2	9.27
Hay, Alfalfa (lb.)	995.7	25.95	813.2	26.32	111.1	2.98	1,278.4	34.10
Hay, Grass (lb.)	4,975.8	100.86	4,791.3	94.72	5,875.9	121.17	4,967.8	99.11
Pasture (aum)	7.1	115.11	6.9	121.65	6.1	113.61	8.2	82.11
Other feed stuffs (lb)	420.3	20.61	742.9	36.23	620.7	10.87	95.3	13.98
Breeding fees		2.05		1.65		1.94		6.22
Veterinary		23.68		25.37		20.42		24.18
Supplies		13.11		8.93		6.51		19.26
Fuel & oil		26.43		35.36		27.94		19.71
Repairs		25.17		31.16		30.75		20.59
Custom hire		9.69		2.41		14.33		14.09
Livestock leases		3.70		7.91		7.37		1.56
Operating interest		6.76		8.22		14.96		2.05
Total direct expenses		433.04		483.64		443.68		387.06
Return over direct expense		246.52		75.62		261.60		406.65
Overhead Expenses								
Hired labor		13.11		20.14		5.86		17.99
Farm insurance		9.01		8.21		10.23		7.80
Utilities		8.14		8.05		5.05		9.57
Interest		12.08		10.38		13.59		8.58
Mach & bldg depreciation		33.12		16.88		35.90		39.77
Miscellaneous		16.44		15.97		13.44		17.13
Total overhead expenses		91.90		79.62		84.05		100.83
Total dir & ovhd expenses		524.94		563.26		527.74		487.89
Net return		154.62		-4.00		177.54		305.81
Labor & management charge		71.53		54.83		73.81		71.72
Net return over lbr & mgt		83.09		-58.83		103.74		234.09
Cost of Production Per Cwt. Produced								
Total direct expense per unit		87.94		116.40		88.79		68.89
Total dir& ovhd expense per unit		106.60		135.57		105.61		86.84
With other revenue adjustments		120.15		156.83		121.08		90.96
With labor and management		134.67		170.03		135.85		103.73
Est. labor hours per unit		5.33		5.60		5.56		4.90
Other Information								
Number of cows		156.7		216.1		103.5		155.3
Pregnancy percentage		96.9		93.4		98.8		99.2
Pregnancy loss percentage		1.1		1.1		1.4		0.3
Culling percentage		13.0		14.3		13.2		10.9
Calving percentage		95.9		92.3		97.4		98.8
Weaning percentage		86.8		79.8		90.7		93.0
Calves sold per cow		0.90		0.82		0.92		0.98
Calf death loss percent		9.7		16.2		6.5		5.3
Cow death loss percent		2.4		3.9		1.3		1.6
Average weaning weight		548		506		532		588
Lb. weaned/exposed female		476		404		482		547
Feed cost per cow		322.46		362.63		319.48		279.39
Avg wgt/ Beef Calves sold		579		495		621		633
Avg price / cwt.		147.90		158.24		142.56		146.26

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

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

	Avg. Of All Farms	
Number of farms	9	
	Quantity	Value
Beef Calves sold (lb)	52.10	67.39
Transferred out (lb)	45.30	66.63
Cull sales		22.69
Other income		-
Purchased		-10.82
Transferred in		-22.80
Inventory change		31.08
Gross margin		154.16
Direct Expenses		
Protein Vit Minerals (lb.)	41.76	7.68
Complete Ration (lb.)	28.18	2.71
Corn Silage (lb.)	310.67	5.17
Hay, Alfalfa (lb.)	86.52	2.86
Hay, Grass (lb.)	607.44	11.10
Oats (bu.)	0.17	0.34
Pasture (aum)	1.07	19.21
Stover (lb.)	98.31	1.20
Other feed stuffs (lb)	176.13	5.13
Veterinary		5.12
Supplies		4.58
Fuel & oil		7.34
Repairs		11.06
Custom hire		2.14
Operating interest		2.02
Total direct expenses		87.64
Return over direct expense		66.52
Overhead Expenses		
Machinery leases		0.67
Farm insurance		1.94
Utilities		1.21
Interest		3.71
Mach & bldg depreciation		3.90
Miscellaneous		4.73
Total overhead expenses		16.16
Total dir & ovhd expenses		103.80
Net return		50.36
Labor & management charge		14.44
Net return over lbr & mgt		35.92
Cost of Production Per Cwt. Produced		
Total direct expense per unit		87.64
Total dir& ovhd expense per unit		103.80
With other revenue adjustments		101.67
With labor and management		116.10
Est. labor hours per unit		1.07
Other Information		
Number of cows		147.7
Pregnancy percentage		98.7
Pregnancy loss percentage		0.7
Culling percentage		14.7
Calving percentage		98.0
Weaning percentage		88.8
Calves sold per cow		0.82
Calf death loss percent		7.9
Cow death loss percent		2.8
Average weaning weight		624
Lb. weaned/exposed female		554
Feed cost per cow		317.96
Avg wgt/ Beef Calves sold		719
Avg price / cwt.		129.34

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

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

	Avg. Of All Farms	
Number of farms	9	
	Quantity	Value
Beef Calves sold (lb)	299.0	386.80
Transferred out (lb)	260.0	382.47
Cull sales		130.22
Other income		-
Purchased		-62.13
Transferred in		-130.85
Inventory change		178.38
Gross margin		884.90
Direct Expenses		
Protein Vit Minerals (lb.)	239.7	44.07
Complete Ration (lb.)	161.8	15.58
Corn (bu.)	2.7	15.09
Corn Silage (lb.)	1,783.2	29.66
Hay, Alfalfa (lb.)	496.6	16.44
Hay, Grass (lb.)	3,486.7	63.69
Pasture (aum)	6.1	110.28
Stover (lb.)	564.3	6.87
Other feed stuffs (lb)	1,009.2	16.29
Veterinary		29.36
Supplies		26.26
Fuel & oil		42.10
Repairs		63.49
Custom hire		12.31
Operating interest		11.59
Total direct expenses		503.07
Return over direct expense		381.82
Overhead Expenses		
Machinery leases		3.83
Farm insurance		11.16
Utilities		6.96
Interest		21.27
Mach & bldg depreciation		22.36
Miscellaneous		27.17
Total overhead expenses		92.76
Total dir & ovhd expenses		595.83
Net return		289.07
Labor & management charge		82.86
Net return over lbr & mgt		206.21
Cost of Production Per Cwt. Produced		
Total direct expense per unit		87.64
Total dir& ovhd expense per unit		103.80
With other revenue adjustments		101.67
With labor and management		116.10
Est. labor hours per unit		6.12
Other Information		
Number of cows		147.7
Pregnancy percentage		98.7
Pregnancy loss percentage		0.7
Culling percentage		14.7
Calving percentage		98.0
Weaning percentage		88.8
Calves sold per cow		0.82
Calf death loss percent		7.9
Cow death loss percent		2.8
Average weaning weight		624
Lb. weaned/exposed female		554
Feed cost per cow		317.96
Avg wgt/ Beef Calves sold		719
Avg price / cwt.		129.34

Livestock Enterprise Analysis
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Net Return Per Unit)

Beef Replacement Heifers -- Average Per Head Sold/Trans

	Avg. Of All Farms		*Low 20%*		*40 - 60%*		*High 20%*	
Number of farms	27		5		6		6	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Beef Replace sold (hd)	0.3	342.34	0.0	43.36	0.0	20.29	0.4	538.31
Transferred out (hd)	0.7	942.93	1.0	1,187.57	1.0	1,217.45	0.6	853.13
Cull sales (hd)	0.0	10.13	-	-	0.0	26.04	-	-
Other income		-		-		-		-
Purchased (hd)	0.1	-92.81	0.3	-356.18	-	-	-	-
Transferred in (hd)	0.8	-590.68	0.9	-773.77	1.0	-712.63	0.8	-546.72
Inventory change (hd)	-0.1	-106.89	0.2	243.24	-	-	-0.2	-188.67
Gross margin		505.02		344.21		551.15		656.05
Direct Expenses								
Corn Distillers Grn (dry) (lb.)	50.2	1.76	324.3	11.35	-	-	-	-
Beet Pulp (dry) (lb.)	697.6	8.69	551.4	4.32	-	-	585.9	7.32
Protein Vit Minerals (lb.)	33.8	8.83	15.7	4.12	59.9	13.07	17.2	4.11
Complete Ration (lb.)	382.9	20.58	127.4	17.21	1,072.9	45.83	328.1	18.33
Corn (bu.)	3.9	21.29	6.9	27.89	7.8	46.20	2.8	14.45
Corn Silage (lb.)	905.4	15.08	1,687.6	30.34	937.5	14.58	390.6	8.79
Hay, Alfalfa (lb.)	547.6	15.13	1,548.1	37.11	312.5	8.33	650.8	21.01
Hay, Grass (lb.)	2,162.5	49.14	1,859.5	39.46	3,229.2	72.97	1,450.0	28.95
Oats (bu.)	1.0	2.62	-	-	6.1	16.30	-	-
Pasture (aum)	4.0	65.03	5.3	66.48	4.3	101.59	3.6	53.42
Straw (lb.)	314.6	3.90	282.2	4.93	104.2	0.55	1,046.9	13.01
Screenings, Heavy (lb.)	44.9	1.69	-	-	-	-	209.5	7.91
DDGS (lb.)	121.3	7.04	15.1	1.46	-	-	-	-
Other feed stuffs (lb)	61.1	2.42	45.4	0.68	-	-	250.0	3.13
Veterinary		9.58		10.43		15.68		7.21
Supplies		6.26		2.24		4.79		4.78
Fuel & oil		8.78		8.48		6.43		11.95
Repairs		8.84		5.30		5.33		17.93
Custom hire		5.37		1.30		13.33		3.47
Bedding		1.87		3.24		-		0.70
Total direct expenses		263.89		276.34		364.99		226.45
Return over direct expense		241.13		67.87		186.16		429.59
Overhead Expenses								
Hired labor		3.32		1.56		2.18		3.94
Mach & bldg depreciation		8.58		6.82		8.13		8.63
Miscellaneous		10.40		11.01		7.20		11.04
Total overhead expenses		22.30		19.38		17.52		23.61
Total dir & ovhd expenses		286.19		295.72		382.51		250.07
Net return		218.83		48.49		168.65		405.98
Labor & management charge		16.37		13.48		15.50		12.94
Net return over lbr & mgt		202.46		35.01		153.14		393.04
Est. labor hours per unit		1.18		0.89		1.40		1.13
Other Information								
No. purchased or trans in		39		44		33		34
Number sold or trans out		44		37		32		43
Average number of head		39		35		33		34
Percentage death loss		0.5		1.4		1.0		-
Feed cost per average head		255.71		255.91		309.75		223.88

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

Beef Backgrounding -- Average Per Cwt. Produced

	Avg. Of All Farms	
Number of farms	12	
	Quantity	Value
Backgnd Beef sold (lb)	226.60	316.74
Transferred out (lb)	68.33	93.23
Other income		3.69
Purchased (lb)	-27.86	-39.88
Transferred in (lb)	-230.26	-350.22
Inventory change (lb)	59.71	113.48
Gross margin		137.04
Direct Expenses		
Corn Gluten (lb.)	18.48	1.80
Protein Vit Minerals (lb.)	10.58	3.82
Creep / Starter (lb.)	18.11	2.03
Complete Ration (lb.)	68.35	9.19
Barley (bu.)	1.01	2.56
Corn (bu.)	2.71	13.21
Corn Silage (lb.)	451.66	8.08
Hay, Alfalfa (lb.)	171.30	5.21
Hay, Grass (lb.)	221.77	4.63
Screenings, Heavy (lb.)	19.30	1.86
DDGS (lb.)	35.44	3.56
Other feed stuffs (lb)	65.66	0.42
Veterinary		2.78
Fuel & oil		5.25
Repairs		4.35
Custom hire		0.74
Marketing		2.17
Bedding		0.26
Operating interest		0.14
Total direct expenses		72.06
Return over direct expense		64.98
Overhead Expenses		
Hired labor		1.53
Utilities		1.19
Mach & bldg depreciation		3.24
Miscellaneous		3.09
Total overhead expenses		9.05
Total dir & ovhd expenses		81.11
Net return		55.93
Labor & management charge		6.96
Net return over lbr & mgt		48.97
Cost of Production Per Cwt. Produced		
Total direct expense per unit		116.97
Total dir& ovhd expense per unit		120.04
With other revenue adjustments		120.04
With labor and management		122.40
Est. labor hours per unit		0.51
Other Information		
No. purchased or trans in		146
Number sold or trans out		117
Percentage death loss		0.2
Avg. daily gain (lb.)		2.00
Lb. of conc / lb. of gain		4.27
Lb. of feed / lb. of gain		9.80
Feed cost per cwt. of gain		56.37
Feed cost per head		115.74
Avg wgt / Backgnd Beef sold		736
Avg sales price / cwt.		139.78

Livestock Enterprise Analysis
North Dakota Farm Business Management Education
Region 3 - South Central North Dakota, 2011
(Farms Sorted By Net Return Per Unit)

Beef Backgrounding -- Average Per Head

	Avg. Of All Farms	
Number of farms	12	
	Quantity	Value
Backgnd Beef sold (lb)	465.3	650.42
Transferred out (lb)	140.3	191.45
Other income		7.58
Purchased (lb)	-57.2	-81.90
Transferred in (lb)	-472.8	-719.17
Inventory change (lb)	122.6	233.03
Gross margin		281.41
Direct Expenses		
Corn Gluten (lb.)	37.9	3.70
Protein Vit Minerals (lb.)	21.7	7.83
Complete Ration (lb.)	140.3	18.88
Barley (bu.)	2.1	5.25
Corn (bu.)	5.6	27.12
Corn Silage (lb.)	927.5	16.60
Hay, Alfalfa (lb.)	351.8	10.69
Hay, Grass (lb.)	455.4	9.51
Screenings, Heavy (lb.)	39.6	3.82
DDGS (lb.)	72.8	7.32
Other feed stuffs (lb)	172.0	5.03
Veterinary		5.71
Fuel & oil		10.78
Repairs		8.93
Custom hire		1.53
Marketing		4.46
Bedding		0.53
Operating interest		0.29
Total direct expenses		147.97
Return over direct expense		133.44
Overhead Expenses		
Hired labor		3.15
Farm insurance		1.89
Utilities		2.44
Mach & bldg depreciation		6.65
Miscellaneous		4.45
Total overhead expenses		18.59
Total dir & ovhd expenses		166.56
Net return		114.85
Labor & management charge		14.29
Net return over lbr & mgt		100.57
Cost of Production Per Cwt. Produced		
Total direct expense per unit		116.97
Total dir& ovhd expense per unit		120.04
With other revenue adjustments		120.04
With labor and management		122.40
Est. labor hours per unit		1.04
Other Information		
No. purchased or trans in		146
Number sold or trans out		117
Percentage death loss		0.2
Avg. daily gain (lb.)		2.00
Lb. of conc / lb. of gain		4.27
Lb. of feed / lb. of gain		9.80
Feed cost per cwt. of gain		56.37
Feed cost per head		115.74
Avg wgt / Backgnd Beef sold		736
Avg sales price / cwt.		139.78

Figure 1. Gross Cash Income Per Farm

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

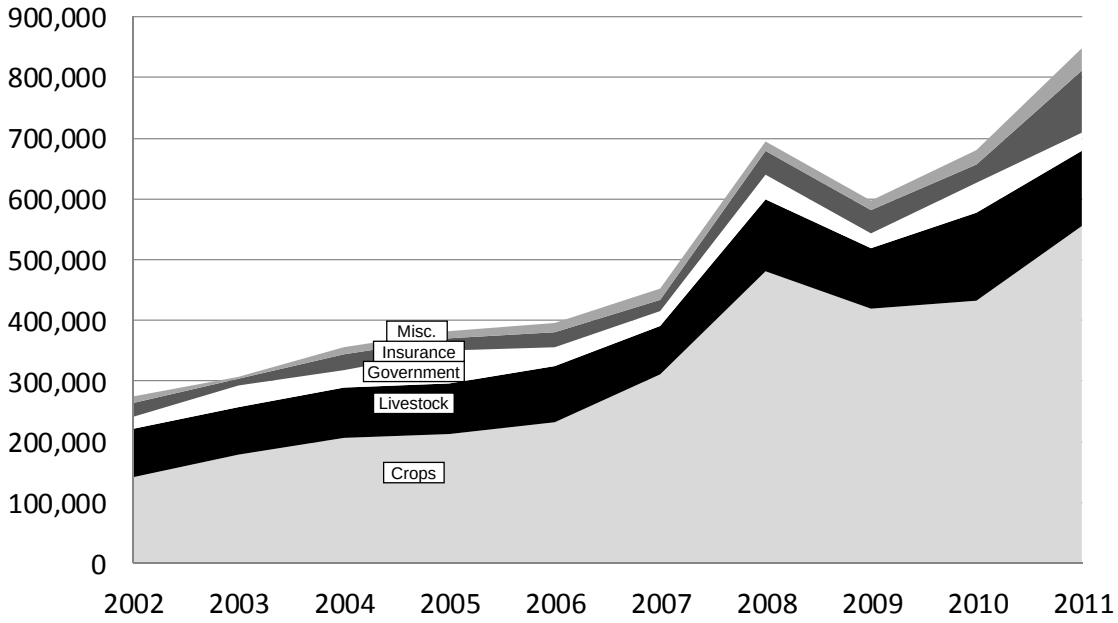
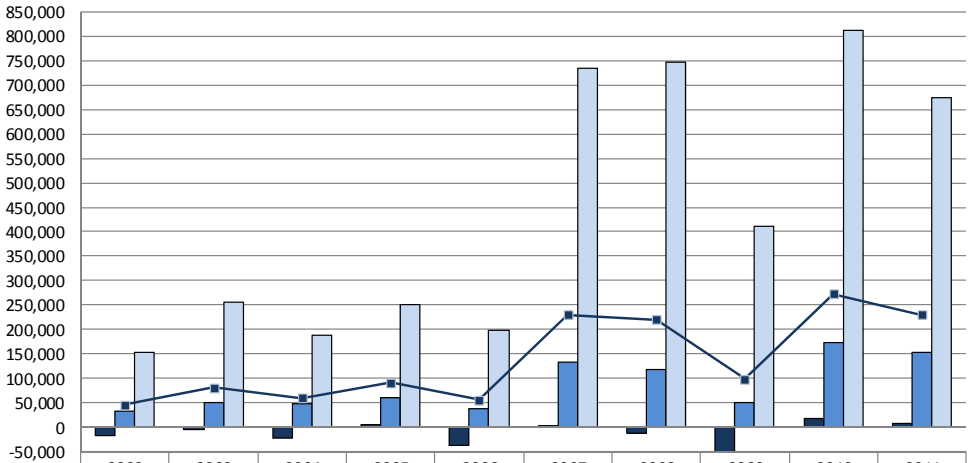


Figure 2. Net Farm Income (Accrual) Per Farm

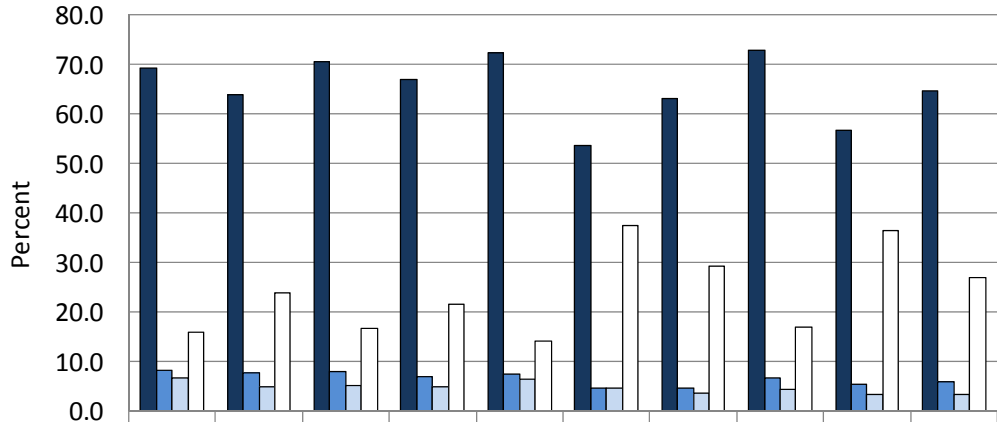
N.D. Farm Business Management Education Program – South Central Region



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
20% Low Profit	(16,539)	(3,965)	(21,402)	5,197	(36,393)	3,662	(10,824)	(80,051)	18,966	9,070
Middle 60% Profit	31,919	50,104	47,266	60,844	37,916	133,111	119,505	50,872	172,967	153,465
20% High Profit	153,612	255,698	187,180	251,366	198,031	733,734	746,887	411,327	812,055	675,386
Average of All	46,566	81,271	60,314	91,141	56,030	230,354	220,630	99,091	273,012	230,398

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

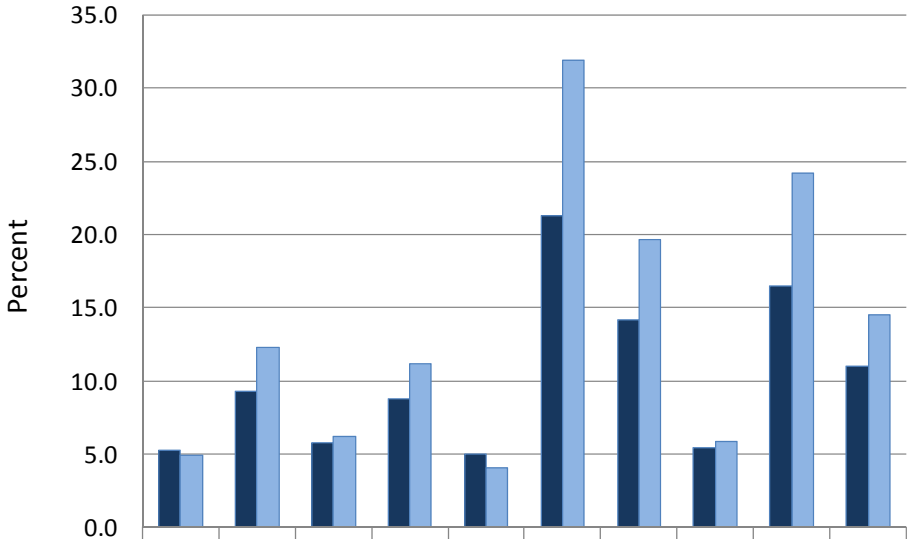
N.D. Farm Business Management Education Program – South Central Region



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Operating Exp. %	69.3	63.8	70.5	67.0	72.4	53.7	63.2	73.0	56.6	64.6
Depreciation %	8.2	7.6	7.9	6.9	7.4	4.5	4.5	6.5	5.2	5.8
Interest Exp. %	6.6	4.8	5.0	4.7	6.2	4.5	3.5	4.2	3.3	3.3
Net Farm Inc. %	15.9	23.8	16.6	21.5	14.0	37.3	29.1	16.8	36.3	26.8

Figure 4. Profitability Measures Per Farm

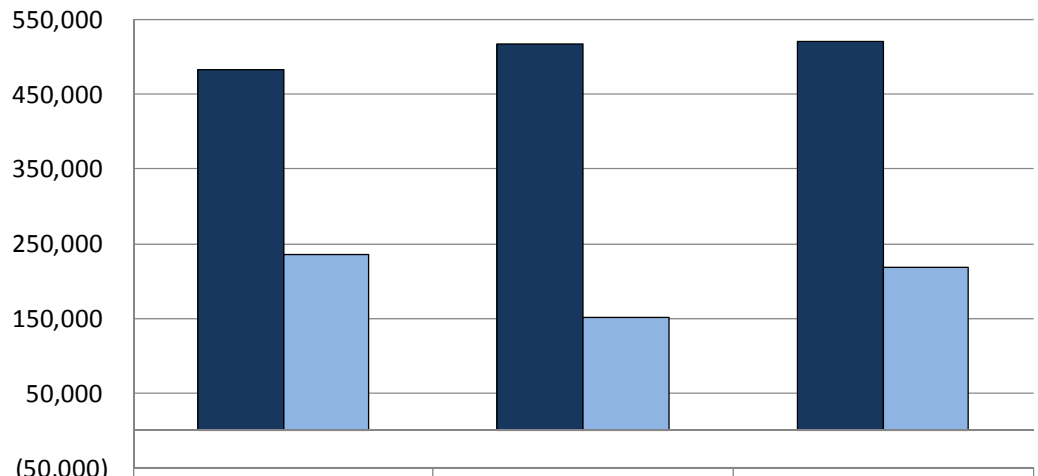
N.D. Farm Business Management Education Program – South Central Region



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Rate of Return on Assets	5.3	9.3	5.8	8.8	5.0	21.3	14.2	5.4	16.5	11.0
Rate of Return on Equity	4.9	12.3	6.2	11.2	4.1	31.9	19.7	5.9	24.2	14.5

Figure 5. Assets and Liabilities Per Farm, 2011

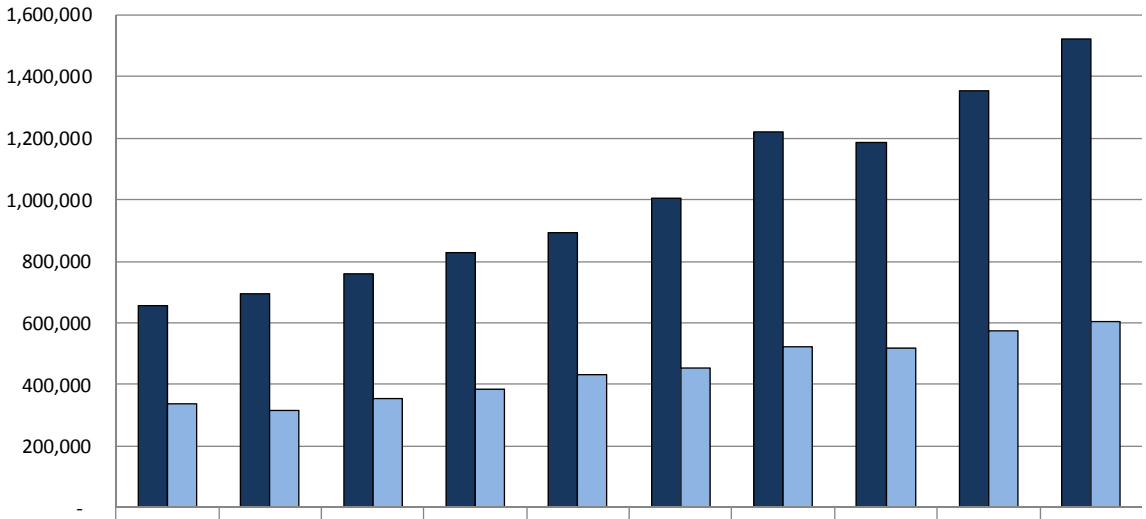
N.D. Farm Business Management Education Program – South Central Region



	Current	Intermediate	Longterm
Farm Assets	482,666	517,896	521,281
Farm Liabilities	235,643	151,218	218,885

Figure 6. Total Farm Assets and Liabilities

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



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Assets	657,201	693,493	758,314	827,740	892,986	1,007,44	1,218,73	1,188,35	1,355,38	1,521,84
Liabilities	338,736	317,242	356,357	384,206	432,110	453,700	521,883	517,110	573,080	605,746

Figure 7. Household and Personal Expenses

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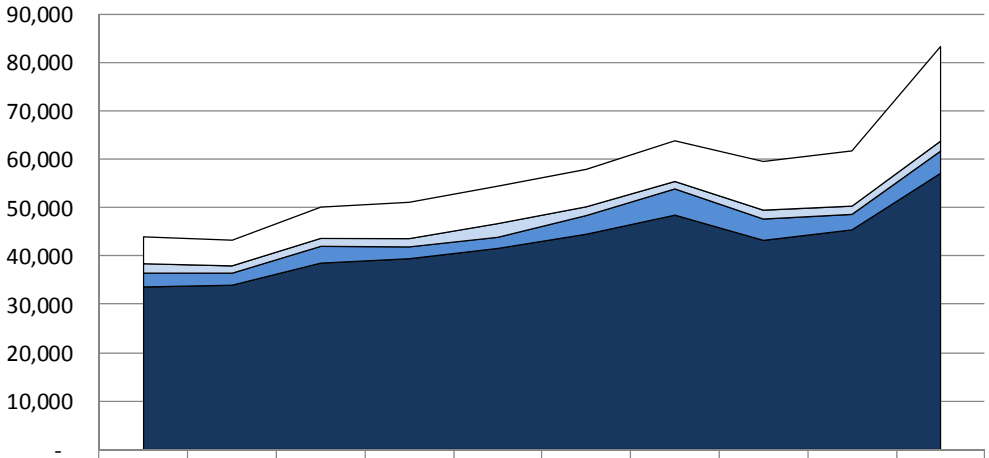

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Income Taxes	5,546	5,303	6,463	7,500	7,734	7,737	8,410	10,055	11,418	19,550
Life Insurance	1,933	1,506	1,638	1,712	2,829	1,808	1,524	1,833	1,703	2,067
Furnishings & Vehicle	2,870	2,488	3,464	2,443	2,288	3,857	5,420	4,406	3,194	4,577
Family Living	33,564	33,931	38,491	39,399	41,537	44,463	48,406	43,193	45,367	57,042

Figure 8. Crop Acreage Per Farm

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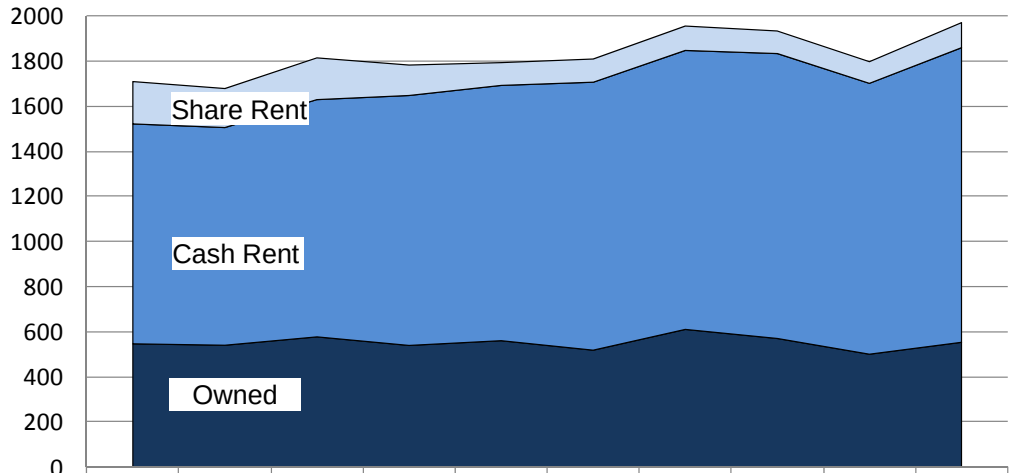
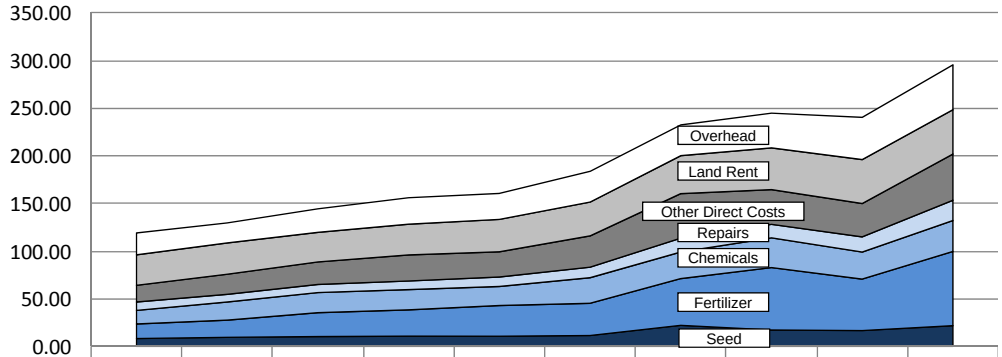


	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Share Rent	188	173	185	135	101	103	108	100	96	111
Cash Rent	975	965	1052	1108	1132	1188	1237	1263	1201	1306
Owned	546	540	577	539	560	518	610	570	500	553

Figure 9. Spring Wheat Costs Per Acre

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



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2010
Overhead	22.96	21.02	24.75	27.79	27.30	32.28	32.36	36.48	44.38	47.15
Land Rent	32.04	32.87	31.05	32.31	34.04	35.53	39.84	43.82	46.18	46.58
Other Direct Costs	17.49	21.13	23.65	27.36	26.48	32.83	46.76	36.48	35.01	48.52
Repairs	8.86	8.04	8.55	9.01	9.90	11.09	14.56	14.18	15.96	21.26
Chemicals	14.21	19.09	21.09	21.34	20.07	26.84	27.94	31.23	28.40	32.51
Fertilizer	15.34	18.02	25.15	27.61	32.20	33.86	49.10	65.59	54.06	78.00
Seed	8.21	9.48	10.24	10.70	10.65	11.39	22.07	17.15	16.58	21.69

Figure 10. Average Net Return Per Beef Cow

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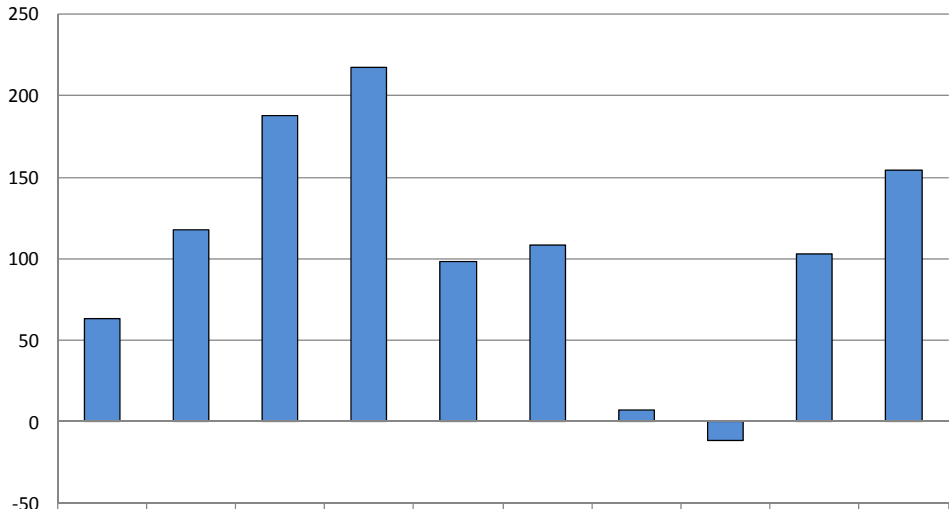

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Avg. Net Return	62.82	117.38	187.63	217.72	98.40	108.45	6.87	-11.35	102.87	154.62

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