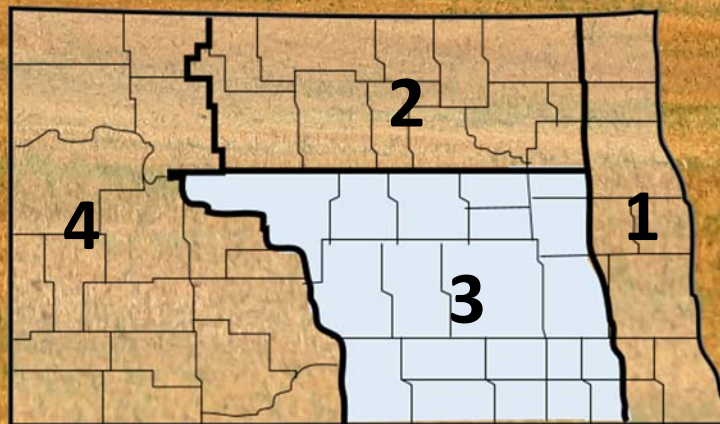


2022 ANNUAL REPORT

South Central North Dakota

North Dakota Farm Management Education





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The N.D. Farm Management Education Association recognizes the listed organizations for their contribution toward the production and distribution of the N.D. Farm and Ranch Business Management Regional and State Averages for 2022.

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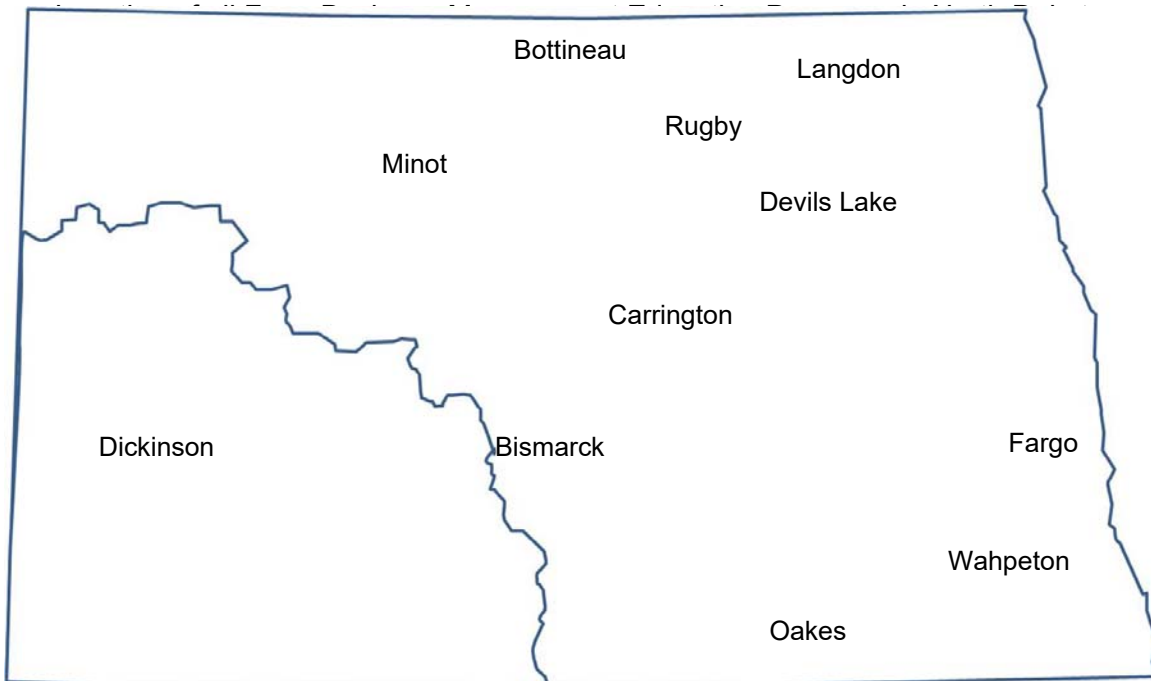
NORTH DAKOTA FARM BUSINESS MANAGEMENT EDUCATION

REGION 3 – SOUTH CENTRAL AVERAGES 2022 ANNUAL REPORT

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

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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 2022 closed out on a timely basis. The farm management instructors cited above generated the Finpack year-end farm analyses. Bryon Parman, NDSU Extension Service, databased the Finpack analyses of farms and generated the comparative tables for this report.



2022 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 2022 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 34th year that the regional averages have been generated in North Dakota based upon the four regions shown in the state map on the cover of this publication. A regional report has been generated and published for Regions 2 – North Central, 3 – South Central and 4 - Western identified on the North Dakota map. Farms in Region 1 – Red River Valley are located within the Red River Valley. Those farms are contained in a combined Minnesota-North Dakota Red River Valley report. The state averages report includes all farms participating in the North Dakota Farm Business Management Education Program that were represented in the regional averages and also those farms which were processed and submitted after the March deadline date. All of these reports may be ordered from Farm Business Management, P.O. Box 6022, Bismarck, ND, 58506-6022 for \$5 per copy. The reports are available online at www.ndfarmmanagement.com.

EXPLANATORY NOTES FOR THE FARM OPERATORS' REPORTS

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

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

Farm Income Statement

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

The first section of the income statement is a table which lists cash farm income. There are several sources of cash farm income. Cash sales of crops are listed first followed by cash sales of livestock.

Government payments are categorized. "Crop government payments" are Agricultural Risk Coverage (ARC) and Price Loss Coverage (PLC) payments. "LDP payments" are loan deficiency payments that may be received on production when local prices are below the county loan rate for the crop. "Livestock government payments" include dairy MPP payments and other livestock related payments. "CRP payments" are funds received for land enrolled in the Conservation Reserve Program. "Other government payments" refers to all other government payments such as disaster payments, EQIP, CSP, and Market Facilitation Payments (MFP).

Lastly, cash income is categorized by sources such as custom work, cash patronage dividends, crop and property insurance indemnities, sale of resale items, and other.

The second section of the income statement lists cash expenses. "Hired labor" includes only labor which was hired and paid. "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 operators 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 \$30,000 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.

Working Capital to Operating Expenses: Measures the operating capital available against the amount of the business's operating expenses.

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.

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.

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.

Debt Coverage Ratio: Indicates whether your business generated enough income to cover current interest expense and all intermediate and long-term debt payments.

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.

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

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

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

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

Crop Production and Marketing Summary

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

Household and Personal Expenses

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

Operator and Labor Information

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

Nonfarm Summary

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

Farm Income Statement
North Dakota Farm Business Management Education Program
Region 3 - South Central Northd Dakota, 2022
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	47	9	10	10
Cash Farm Income				
Barley	32,595	-	4,802	147,551
Beans, Black Turtle	651	-	-	3,060
Beans, Pinto	84,686	-	1,908	352,839
Canola	38,451	660	9,403	136,002
Corn	319,106	44,469	316,049	710,068
Hay, Alfalfa	252	-	-	-
Hay, Small Grain	124	-	-	-
Millet	1,374	-	-	-
Oats	2,176	1,147	4,054	-
Rye	349	-	1,640	-
Soybeans	337,417	122,661	362,916	411,595
Sunflowers	66,753	-	45,341	223,904
Wheat, Durum	89,869	-	-	97,310
Wheat, Spring	155,625	14,095	120,468	316,639
Wheat, Winter	785	4,099	-	-
Rented Out	145	-	-	683
Flax, Organic	4,325	-	20,330	-
Hay	1,818	2,422	226	2,415
Beans, Edible Organic	369	-	1,735	-
Miscellaneous crop income	3,095	708	1,278	4,941
Beef Bulls	638	-	-	-
Beef Cow-Calf, Beef Calves	51,178	140,241	13,150	29,832
Beef Replacement Heifers	3,949	-	-	-
Beef Backgrounding	27,421	30,921	-	56,469
Dairy, Milk	97,057	-	456,168	-
Dairy, Dairy Calves	1,178	-	5,535	-
Beef Finish Cull Cows	915	-	-	-
Cull breeding livestock	18,258	10,536	35,446	8,450
Misc. livestock income	6,446	26	-	1,800
Crop government payments	14,948	2,569	4,611	39,828
CRP payments	1,032	654	145	2,619
Livestock govt payments	5,535	5,526	3,891	7,076
Conservation govt payment	13,616	5,815	22,679	19,107
Other government payments	219,279	43,729	163,444	489,879
Custom work income	10,028	-	3,967	22,918
Patronage dividends, cash	10,200	8,140	17,199	12,707
Crop insurance income	227,325	39,992	185,298	615,928
Property insurance income	819	1,664	-	2,293
Livestock insurance inc	200	984	-	56
Farm rental income	6,515	23,665	1,745	541
Other farm income	17,557	6,027	10,656	41,710
Gross Cash Farm Income	1,874,060	510,751	1,814,085	3,758,219

Farm Income Statement (continued)
North Dakota Farm Business Management Education Program
Region 3 - South Central Northd Dakota, 2022
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	47	9	10	10
Cash Farm Expense				
Seed and plants	175,317	27,716	164,988	380,510
Fertilizer	292,048	40,735	172,074	634,522
Crop chemicals	159,870	30,615	112,843	365,602
Crop insurance	77,402	11,117	91,344	171,294
Drying expense	2,615	-	1,935	3,956
Storage	2,452	89	395	9,455
Irrigation energy	1,869	-	1,568	4,498
Packaging and supplies	37	-	-	175
Crop miscellaneous	4,793	688	3,869	17,246
Consultants	5,881	1,504	3,380	11,240
Feeder livestock purchase	12,584	18,006	-	95
Purchased feed	55,490	26,564	182,557	19,363
Breeding fees	2,039	-	7,311	1,640
Veterinary	7,983	4,591	22,732	3,766
Supplies	8,197	4,510	28,075	1,332
Livestock leases	156	722	-	-
Interest	58,094	34,866	72,416	75,684
Fuel & oil	73,060	26,659	77,582	132,025
Repairs	117,052	53,336	109,884	197,091
Custom hire	33,325	18,932	29,567	48,890
Hired labor	75,044	1,890	151,677	153,873
Land rent	188,079	33,770	173,715	468,293
Machinery leases	12,722	540	17,593	31,278
Building leases	154	-	-	-
Real estate taxes	8,600	7,088	5,006	11,627
Farm insurance	25,330	7,305	24,529	52,369
Utilities	17,593	7,220	22,770	34,731
Hauling and trucking	6,912	801	28,108	-
Marketing	2,952	949	6,684	171
Dues & professional fees	8,236	1,183	4,851	20,241
Organic certification	59	-	278	-
Miscellaneous	27,618	15,017	34,096	42,741
Licenses & registrations	241	-	-	-
Total cash expense	1,463,805	376,414	1,551,826	2,893,705
Net cash farm income	410,256	134,337	262,259	864,514
Inventory Changes				
Prepays and supplies	74,346	8,994	277	142,416
Accounts receivable	-110,982	2,607	-37,681	-408,762
Hedging accounts	-10,171	-554	-6,870	-29,086
Other current assets	1,229	-854	230	5,404
Crops and feed	552,531	2,010	350,930	1,993,203
Market livestock	-5,229	-37,430	72	-39,465
Breeding livestock	4,591	-21,579	-800	42,033
Other assets	-8,724	-6,463	-2,067	-47,100
Accounts payable	-224	-55	9,717	-2,570
Accrued interest	-8,425	-11,536	-12,442	-10,014
Total inventory change	488,942	-64,860	301,366	1,646,059
Net operating profit	899,198	69,477	563,625	2,510,573
Depreciation				
Machinery and equipment	-116,714	-16,266	-87,273	-282,641
Titled vehicles	-13,148	-2,731	-11,101	-24,036
Buildings and improvements	-18,441	-1,512	-17,568	-47,489
Total depreciation	-148,302	-20,509	-115,942	-354,166
Net farm income from operations	750,895	48,968	447,683	2,156,407
Gain or loss on capital sales	18,846	5,115	9,233	57,346
Net farm income	769,741	54,083	456,916	2,213,753

Inventory Changes
North Dakota Farm Business Management Education Program
Region 3 - South Central Northd Dakota, 2022
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	47	9	10	10
Net cash farm income	410,256	134,337	262,259	864,514
Crops and Feed				
Ending inventory	1,681,573	217,469	1,039,862	4,849,761
Beginning inventory	1,129,042	215,459	688,932	2,856,558
Inventory change	552,531	2,010	350,930	1,993,203
Market Livestock				
Ending inventory	78,498	72,434	4,965	101,525
Beginning inventory	83,727	109,864	4,893	140,990
Inventory change	-5,229	-37,430	72	-39,465
Accts Receivable				
Ending inventory	85,483	27,667	75,356	255,895
Beginning inventory	196,465	25,061	113,037	664,657
Inventory change	-110,982	2,607	-37,681	-408,762
Prepaid Expenses and Supplies				
Ending inventory	289,725	15,392	118,348	784,026
Beginning inventory	215,379	6,398	118,070	641,610
Inventory change	74,346	8,994	277	142,416
Hedging Activities				
Ending inventory	16,874	111	6,076	45,872
Withdrawals	16,101	-	900	51,318
Beginning inventory	15,641	665	3,071	31,233
Deposits	27,505	-	10,775	95,043
Gain or loss	-10,171	-554	-6,870	-29,086
Other Current Assets				
Ending inventory	26,355	-	62,241	59,561
Beginning inventory	25,125	854	62,012	54,156
Inventory change	1,229	-854	230	5,404
Breeding Livestock				
Ending inventory	175,926	161,270	255,315	168,919
Capital sales	18,247	39,721	3,575	42,799
Beginning inventory	168,485	162,031	257,980	160,747
Capital purchases	21,097	60,540	1,710	8,938
Depreciation, capital adjust	4,591	-21,579	-800	42,033
Other Capital Assets				
Ending inventory	266,532	22,968	170,180	962,573
Capital sales	8,093	151	1,187	30,672
Beginning inventory	281,370	27,391	171,497	1,040,264
Capital purchases	1,979	2,192	1,936	81
Depreciation, capital adjust	-8,724	-6,463	-2,067	-47,100
Accounts Payable				
Beginning inventory	35,709	4,481	67,766	53,025
Ending inventory	35,933	4,537	58,048	55,595
Inventory change	-224	-55	9,717	-2,570
Accrued Interest				
Beginning inventory	28,308	20,486	47,692	22,890
Ending inventory	36,733	32,023	60,134	32,904
Inventory change	-8,425	-11,536	-12,442	-10,014
Total inventory change	488,942	-64,860	301,366	1,646,059
Net operating profit	899,198	69,477	563,625	2,510,573

Depreciation
North Dakota Farm Business Management Education Program
Region 3 - South Central Northd Dakota, 2022
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	47	9	10	10
Net operating profit	899,198	69,477	563,625	2,510,573
Machinery and Equipment				
Ending inventory	1,264,872	275,340	810,332	2,995,925
Capital sales	105,985	7,539	36,153	395,969
Beginning inventory	1,071,483	247,787	696,367	2,537,032
Capital purchases	416,087	51,359	237,392	1,137,503
Depreciation, capital adjust.	-116,714	-16,266	-87,273	-282,641
Titled Vehicles				
Ending inventory	96,033	23,870	85,047	172,520
Capital sales	3,953	2,250	2,156	8,233
Beginning inventory	78,402	18,783	65,124	133,953
Capital purchases	34,732	10,068	33,180	70,836
Depreciation, capital adjust.	-13,148	-2,731	-11,101	-24,036
Buildings and Improvements				
Ending inventory	495,082	84,502	416,318	1,107,254
Capital sales	1,064	-	-	-
Beginning inventory	453,890	76,718	403,997	959,417
Capital purchases	60,697	9,295	29,889	195,326
Depreciation, capital adjust.	-18,441	-1,512	-17,568	-47,489
Total depreciation, capital adj.	-148,302	-20,509	-115,942	-354,166
Net farm income from operations	750,895	48,968	447,683	2,156,407
Gain or loss on capital sales	18,846	5,115	9,233	57,346
Net farm income	769,741	54,083	456,916	2,213,753

Profitability Measures
North Dakota Farm Business Management Education Program
Region 3 - South Central Northd Dakota, 2022
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	47	9	10	10
Profitability (assets valued at cost)				
Net farm income from operations	750,895	48,968	447,683	2,156,407
Rate of return on assets	12.8 %	3.2 %	11.2 %	15.5 %
Rate of return on equity	17.4 %	0.3 %	18.6 %	19.1 %
Operating profit margin	30.4 %	12.0 %	21.8 %	36.9 %
Asset turnover rate	42.3 %	26.7 %	51.5 %	42.1 %
Farm interest expense	66,519	46,403	84,859	85,698
Value of operator lbr and mgmt.	140,552	46,873	110,610	306,625
Return on farm assets	676,863	48,497	421,932	1,935,480
Average farm assets	5,270,575	1,513,908	3,754,902	12,481,101
Return on farm equity	610,343	2,094	337,074	1,849,782
Average farm equity	3,504,250	630,696	1,813,441	9,665,122
Value of farm production	2,227,960	404,772	1,934,911	5,249,584

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	47	9	10	10
Profitability (assets valued at market)				
Net farm income from operations	955,594	156,691	513,839	2,356,200
Rate of return on assets	13.7 %	6.2 %	11.2 %	15.5 %
Rate of return on equity	17.4 %	6.7 %	16.7 %	18.7 %
Operating profit margin	39.6 %	38.6 %	25.2 %	40.7 %
Asset turnover rate	34.5 %	16.1 %	44.4 %	38.1 %
Farm interest expense	66,519	46,403	84,859	85,698
Value of operator lbr and mgmt.	140,552	46,873	110,610	306,625
Return on farm assets	881,561	156,220	488,088	2,135,274
Average farm assets	6,450,406	2,515,466	4,361,852	13,787,203
Return on farm equity	815,042	109,818	403,230	2,049,575
Average farm equity	4,684,080	1,632,254	2,420,391	10,971,224
Value of farm production	2,227,960	404,772	1,934,911	5,249,584

Liquidity & Repayment Capacity Measures
North Dakota Farm Business Management Education Program
Region 3 - South Central Northd Dakota, 2022
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	47	9	10	10
Liquidity				
Current ratio	3.08	2.78	2.03	3.85
Working capital	1,549,536	289,280	716,812	4,702,743
Change in working capital	392,205	-21,346	221,363	1,340,251
Working capital to gross revenue	67.5 %	64.4 %	33.9 %	89.3 %
Working capital to oper expense	116.5 %	86.8 %	48.8 %	176.0 %
Current assets	2,295,187	451,992	1,415,530	6,351,232
Current liabilities	745,651	162,712	698,719	1,648,489
Gross revenues (accrual)	2,296,034	449,342	2,117,468	5,269,042
Total operating expenses	1,330,317	333,463	1,468,984	2,672,771
Repayment capacity				
Net farm income from operations	750,895	48,968	447,683	2,156,407
Depreciation	148,302	20,509	115,942	354,166
Personal income	42,743	34,559	18,363	99,785
Family living/owner withdrawals	-108,963	-64,734	-104,446	-186,241
Cash discrepancy	45	469	200	-95
Income taxes	-33,371	-6,455	-8,224	-70,030
Interest expense	66,519	46,403	84,859	85,698
Debt repayment capacity	868,519	81,319	556,374	2,441,383
Debt payments	172,784	85,667	201,495	219,646
Repayment margin	695,735	-4,348	354,879	2,221,737
Cash replacement allowance	-87,689	-23,542	-18,358	-263,167
Replacement margin	608,046	-27,889	336,521	1,958,570
Debt coverage ratio	5.03	0.95	2.76	11.12
Term debt coverage ratio	5.54	0.94	3.10	13.72
Replacement coverage ratio	3.33	0.74	2.53	5.06

Balance Sheet at Cost Values
North Dakota Farm Business Management Education Program
Region 3 - South Central Northd Dakota, 2022
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	47	9	10	10
Assets				
Current Farm Assets				
Cash and checking balance	116,680	118,918	108,683	254,593
Prepaid expenses & supplies	289,725	15,392	118,348	784,026
Growing crops	12,958	-	431	59,561
Accounts receivable	85,483	27,667	75,356	255,895
Hedging accounts	16,874	111	6,076	45,872
Crops held for sale or feed	1,681,573	217,469	1,039,862	4,849,761
Crops under government loan	-	-	-	-
Market livestock held for sale	78,498	72,434	4,965	101,525
Other current assets	13,396	-	61,810	-
Total current farm assets	2,295,187	451,992	1,415,530	6,351,232
Intermediate Farm Assets				
Breeding livestock	175,926	161,270	255,315	168,919
Machinery and equipment	1,264,872	275,340	810,332	2,995,925
Titled vehicles	96,033	23,870	85,047	172,520
Other intermediate assets	40,090	5,298	146,968	30,256
Total intermediate farm assets	1,576,920	465,778	1,297,663	3,367,620
Long Term Farm Assets				
Farm land	1,122,559	511,463	920,069	1,987,896
Buildings and improvements	495,082	84,502	416,318	1,107,254
Other long-term assets	226,442	17,671	23,211	932,317
Total long-term farm assets	1,844,083	613,635	1,359,598	4,027,467
Total Farm Assets	5,716,190	1,531,405	4,072,792	13,746,320
Total Nonfarm Assets	376,743	243,559	152,808	655,400
Total Assets	6,092,933	1,774,965	4,225,599	14,401,719
Liabilities				
Current Farm Liabilities				
Accrued interest	36,733	32,023	60,134	32,904
Accounts payable	35,933	4,537	58,048	55,595
Current notes	566,594	91,221	468,404	1,426,170
Government crop loans	-	-	-	-
Principal due on term debt	106,391	34,933	112,132	133,820
Total current farm liabilities	745,651	162,712	698,719	1,648,489
Total intermediate farm liabs	281,712	119,700	353,337	324,803
Total long term farm liabilities	866,264	610,687	1,030,772	1,109,245
Total farm liabilities	1,893,628	893,098	2,082,827	3,082,537
Total nonfarm liabilities	65,758	33,950	33,174	113,198
Total liabilities	1,959,385	927,048	2,116,001	3,195,735
Net worth (farm and nonfarm)	4,133,547	847,917	2,109,599	11,205,985
Net worth change	662,041	10,774	369,835	2,005,643
Percent net worth change	19 %	1 %	21 %	22 %
Ratio Analysis				
Current farm liabilities / assets	32 %	36 %	49 %	26 %
Intermediate farm liab. / assets	18 %	26 %	27 %	10 %
Long term farm liab. / assets	47 %	100 %	76 %	28 %
Total debt to asset ratio	32 %	52 %	50 %	22 %

Statement Of Cash Flows
North Dakota Farm Business Management Education Program
Region 3 - South Central Northd Dakota, 2022
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	47	9	10	10
Beginning cash (farm & nonfarm)	122,917	119,111	132,268	249,593
Cash Provided By Operating Activities				
Gross cash farm income	1,874,060	510,751	1,814,085	3,758,219
Total cash farm expense	-1,463,805	-376,414	-1,551,826	-2,893,705
Net cash from hedging transactions	-11,404	-	-9,875	-43,725
Cash provided by operating	398,852	134,337	252,384	820,789
Cash Provided By Investing Activities				
Sale of breeding livestock	18,288	39,721	3,575	42,799
Sale of machinery & equipment	124,010	12,960	44,592	450,841
Sale of titled vehicles	4,733	1,944	2,950	10,707
Sale of farm land	-	-	-	-
Sale of farm buildings	1,064	-	-	-
Sale of other farm assets	8,093	151	1,187	30,672
Sale of nonfarm assets	14,858	1,222	62,713	220
Purchase of breeding livestock	-21,097	-60,540	-1,710	-8,938
Purchase of machinery & equip.	-416,087	-51,359	-237,392	-1,137,503
Purchase of titled vehicles	-34,732	-10,068	-33,180	-70,836
Purchase of farm land	-120,463	-	-184,555	-215,711
Purchase of farm buildings	-60,697	-9,295	-29,889	-195,326
Purchase of other farm assets	-1,979	-2,192	-1,936	-81
Purchase of nonfarm assets	-44,666	-10,605	-55,172	-69,498
Cash provided by investing	-528,675	-88,060	-428,817	-1,162,654
Cash Provided By Financing Activities				
Money borrowed	1,421,352	328,991	1,344,496	2,507,828
Principal payments	-1,182,189	-325,018	-1,079,432	-1,983,108
Personal income	42,743	34,559	18,363	99,785
Family living/owner withdrawals	-108,963	-64,734	-104,446	-186,241
Income and social security tax	-28,456	-5,619	-8,724	-47,279
Capital contributions	232	-	-	-
Capital distributions	-4,628	-	-	-21,750
Dividends paid	-	-	-	-
Cash gifts and inheritances	1,868	8,635	-	1,000
Gifts given	-	-	-	-
Other cash flows	1,626	8,489	-	-
Cash provided by financing	143,585	-14,697	170,257	370,235
Net change in cash balance	13,762	31,580	-6,176	28,369
Ending cash (farm & nonfarm)	136,724	151,160	126,292	277,868
Discrepancy	-45	-469	-200	95

Financial Standards Measures
North Dakota Farm Business Management Education Program
Region 3 - South Central Northd Dakota, 2022
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	47	9	10	10
Liquidity				
Current ratio	3.08	2.78	2.03	3.85
Working capital to gross revenue	67.5 %	64.4 %	33.9 %	89.3 %
Working capital to oper expense	116.5 %	86.8 %	48.8 %	176.0 %
Solvency (market)				
Farm debt to asset ratio	27 %	35 %	44 %	20 %
Farm equity to asset ratio	73 %	65 %	56 %	80 %
Farm debt to equity ratio	0.37	0.53	0.79	0.26
Profitability (cost)				
Rate of return on farm assets	12.8 %	3.2 %	11.2 %	15.5 %
Rate of return on farm equity	17.4 %	0.3 %	18.6 %	19.1 %
Operating profit margin	30.4 %	12.0 %	21.8 %	36.9 %
Asset turnover rate	42.3 %	26.7 %	51.5 %	42.1 %
Repayment Capacity				
Debt coverage ratio	5.03	0.95	2.76	11.12
Term debt coverage ratio	5.54	0.94	3.10	13.72
Replacement coverage ratio	3.33	0.74	2.53	5.06
Efficiency				
Operating expense ratio	57.9 %	74.2 %	69.4 %	50.7 %
Depreciation expense ratio	6.5 %	4.6 %	5.5 %	6.7 %
Interest expense ratio	2.9 %	10.3 %	4.0 %	1.6 %
Net farm income ratio	32.7 %	10.9 %	21.1 %	40.9 %

Crop Production and Marketing Summary
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2022
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	47	9	10	10
Acreage Summary				
Total acres owned	1,282	1,198	627	1,594
Total crop acres	3,306	933	2,708	7,047
Crop acres owned	756	305	515	1,162
Crop acres cash rented	2,502	590	2,147	5,790
Crop acres share rented	48	38	46	95
Total pasture acres	604	901	282	529
Percent crop acres owned	23 %	33 %	19 %	16 %
Mach invest/crop acre cost	380	303	306	414
Mach invest/crop acre market	476	428	361	507
Average Price Received (Cash Sales Only)				
Soybeans per bushel	12.85	-	12.90	12.84
Corn per bushel	6.18	-	6.34	6.39
Wheat, Spring per bushel	8.95	-	8.75	9.10
Wheat, Durum per bushel	11.93	-	-	-
Beans, Pinto per cwt	48.24	-	-	-
Canola per cwt	26.50	-	-	-
Sunflowers per cwt	31.65	-	-	-
Barley per bushel	5.84	-	-	-
Average Yield Per Acre				
Soybeans (bushel)	35.75	30.53	32.54	39.95
Wheat, Spring (bushel)	61.37	-	52.96	65.03
Corn (bushel)	133.70	82.89	131.88	135.04
Sunflowers (cwt)	24.52	-	-	26.62
Barley (bushel)	74.25	-	-	77.83
Wheat, Durum (bushel)	45.10	-	-	-
Hay, Grass (ton)	1.78	-	-	-
Corn Silage (ton)	15.67	-	-	-
Beans, Pinto (cwt)	15.03	-	-	15.22
Hay, Alfalfa (ton)	2.43	-	-	-
Hay, Small Grain (ton)	1.86	-	-	-
Hay (ton)	2.20	-	-	-
Canola (cwt)	15.47	-	-	15.39
Hay, Mixed Alfalfa/Grass (ton)	1.75	-	-	-

Household and Personal Expenses
North Dakota Farm Business Management Education Program
Region 3 - South Central Northd Dakota, 2022
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>
Number of farms	5
Average family size	3.6
Family Living Expenses	
Food and meals expense	14,790
Medical care	6,502
Health insurance	15,464
Cash donations	3,753
Household supplies	8,450
Clothing	3,565
Personal care	2,595
Child / Dependent care	2,102
Alimony and child support	-
Gifts	4,178
Education	1,466
Recreation	13,019
Utilities (household share)	4,812
Personal vehicle operating exp	2,793
Household real estate taxes	719
Dwelling rent	-
Household repairs	1,610
Personal interest	1,545
Disability / Long term care ins	58
Life insurance payments	6,413
Personal property insurance	1,076
Miscellaneous	5,192
Total cash family living expense	100,099
Family living from the farm	-
Total family living	100,099
Other Nonfarm Expenditures	
Income taxes	84,971
Furnishing & appliance purchases	231
Nonfarm vehicle purchases	2,382
Nonfarm real estate purchases	46,560
Other nonfarm capital purchases	5,400
Nonfarm savings & investments	15,100
Total other nonfarm expenditures	154,643
Total cash family living investment & nonfarm capital purch	254,743

Operator and Labor Information
North Dakota Farm Business Management Education Program
Region 3 - South Central Northd Dakota, 2022
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	47	9	10	10
Operator Information				
Average number of operators	1.2	1.0	1.3	1.6
Average age of operators	49.1	54.7	46.2	48.4
Average number of years farming	25.4	30.0	23.2	27.0
Results Per Operator				
Working capital	1,277,687	289,280	551,394	2,939,215
Total assets (market)	6,106,690	2,834,765	3,776,953	9,903,262
Total liabilities	1,615,634	927,048	1,627,693	1,997,334
Net worth (market)	4,491,056	1,907,717	2,149,260	7,905,928
Net worth excl deferred liabs	4,491,056	1,907,717	2,149,260	7,905,928
Gross farm income	1,893,221	449,342	1,628,821	3,293,151
Total farm expense	1,274,061	400,375	1,284,450	1,945,397
Net farm income from operations	619,159	48,968	344,372	1,347,754
Net nonfarm income	35,244	34,559	14,125	62,365
Family living & tax withdrawals	117,326	70,720	86,516	160,229
Total acres owned	1,057.4	1,197.7	482.6	996.5
Total crop acres	2,726.0	932.9	2,082.9	4,404.6
Crop acres owned	623.6	305.3	396.0	726.4
Crop acres cash rented	2,062.8	590.0	1,651.6	3,618.6
Crop acres share rented	39.6	37.5	35.2	59.6
Total pasture acres	498.4	900.8	216.8	330.6
Labor Analysis				
Number of farms	47	9	10	10
Total unpaid labor hours	2,381	2,033	1,840	3,270
Total hired labor hours	3,070	106	6,966	5,298
Total labor hours per farm	5,451	2,139	8,806	8,568
Unpaid hours per operator	1,963	2,033	1,415	2,044
Value of farm production / hour	408.73	189.24	219.73	612.69
Net farm income / unpaid hour	315.39	24.08	243.31	659.45
Average hourly hired labor wage	25.60	17.90	22.03	31.85
Partnerships & LLCs				
Number of farms	6	-	2	3
Number of operators	2.3	-	-	-
Owner withdrawals per farm	-	-	-	-
Withdrawals per operator	-	-	-	-

Nonfarm Summary
North Dakota Farm Business Management Education Program
Region 3 - South Central Northd Dakota, 2022
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	47	9	10	10
Nonfarm Income				
Personal wages & salary	21,817	26,832	16,652	21,826
Net nonfarm business income	15,453	45	-	71,271
Personal rental income	679	-	-	1,800
Personal interest income	759	248	37	2,794
Personal cash dividends	13	-	60	-
Tax refunds	1,284	2,460	1,133	584
Nontaxable personal inc.	1,626	8,489	-	-
Other nonfarm income	2,739	4,974	482	1,511
Total nonfarm income	44,369	43,048	18,363	99,785
Gifts and inheritances	1,868	8,635	-	1,000
Nonfarm Assets (market)				
Checking & savings	20,044	32,242	17,609	23,274
Stocks & bonds	3,403	-	1,058	8,500
Other current assets	7,516	-	1,696	3,031
Furniture & appliances	13,578	29,257	7,470	1,000
Nonfarm vehicles	36,206	30,584	21,851	48,023
Cash value of life ins.	14,919	6,944	10,088	11,826
Retirement accounts	115,683	91,729	45,770	226,402
Other intermediate assets	6,373	1,378	1,330	5,000
Nonfarm real estate	164,803	52,473	89,598	317,242
Personal bus. investment	2,869	3,333	750	3,503
Other long term assets	22,223	-	-	45,100
Total nonfarm assets	407,616	247,940	197,219	692,901
Nonfarm Liabilities				
Accrued interest	178	425	80	24
Accounts payable	8,964	4,424	5,147	24,276
Current notes	-	-	-	-
Princ due on term debt	4,280	4,229	3,214	4,921
Total current liabilities	27,674	12,550	10,440	69,204
Intermediate liabilities	10,312	21,400	817	15,865
Long term liabilities	27,771	-	21,917	28,129
Total nonfarm liabilities	65,758	33,950	33,174	113,198
Nonfarm net worth	341,858	213,991	164,045	579,703
Nonfarm debt to asset ratio	16 %	14 %	17 %	16 %

Financial Summary
North Dakota Farm Business Management Education Program
Region 3 - South Central Northd Dakota, 2022
(Farms Sorted By Gross Farm Income)

	<u>Avg. Of All Farms</u>	<u>250,001 - 500,000</u>	<u>500,001 - 1,000,000</u>	<u>1,000,001- 2,000,000</u>	<u>Over 2,000,000</u>
Number of farms	47	5	14	13	12
Income Statement					
Gross cash farm income	1,874,060	375,303	772,792	1,509,690	4,605,423
Total cash farm expense	1,463,805	295,609	592,837	1,144,650	3,651,484
Net cash farm income	410,256	79,694	179,955	365,040	953,939
Inventory change	488,942	44,630	121,849	507,088	1,200,170
Depreciation	-148,302	-26,083	-55,998	-125,644	-365,254
Net farm income from operations	750,895	98,241	245,806	746,484	1,788,855
Gain or loss on capital sales	18,846	8,420	9,169	7,739	51,066
Average net farm income	769,741	106,662	254,975	754,223	1,839,921
Median net farm income	433,647	98,924	284,422	580,694	1,445,707
Profitability (cost)					
Rate of return on assets	12.8 %	4.1 %	10.2 %	16.1 %	12.6 %
Rate of return on equity	17.4 %	4.4 %	14.2 %	25.9 %	16.2 %
Operating profit margin	30.4 %	17.7 %	24.2 %	35.1 %	30.1 %
Asset turnover rate	42.3 %	23.1 %	42.1 %	45.9 %	42.0 %
Profitability (market)					
Rate of return on assets	13.7 %	16.0 %	10.1 %	15.4 %	13.7 %
Rate of return on equity	17.4 %	18.9 %	12.4 %	21.5 %	17.1 %
Operating profit margin	39.6 %	114.1 %	33.9 %	43.0 %	37.2 %
Asset turnover rate	34.5 %	14.1 %	29.7 %	35.8 %	36.8 %
Liquidity & Repayment (end of year)					
Current assets	2,295,187	659,819	738,852	1,655,018	6,027,802
Current liabilities	745,651	192,932	323,950	485,643	1,927,044
Current ratio	3.08	3.42	2.28	3.41	3.13
Working capital	1,549,536	466,886	414,903	1,169,375	4,100,758
Change in working capital	392,205	19,545	60,998	394,164	1,029,537
Working capital to gross revenue	67.5 %	113.3 %	46.6 %	58.2 %	73.7 %
Working capital to oper expense	116.5 %	171.6 %	74.4 %	110.3 %	125.4 %
Debt coverage ratio	5.03	2.52	2.92	4.39	6.35
Term debt coverage ratio	5.54	2.54	3.12	4.88	7.06
Replacement coverage ratio	3.33	1.53	2.33	3.23	3.78
Term debt to EBITDA	1.06	1.90	1.49	1.48	0.78
Solvency (end of year at cost)					
Number of farms	47	5	14	13	12
Total assets	6,092,933	1,965,113	2,457,664	5,169,523	14,450,245
Total liabilities	1,959,385	595,222	849,437	2,127,291	4,098,066
Net worth	4,133,547	1,369,891	1,608,227	3,042,232	10,352,179
Net worth change	662,041	129,166	213,178	598,235	1,634,348
Farm debt to asset ratio	33 %	32 %	38 %	43 %	29 %
Total debt to asset ratio	32 %	30 %	35 %	41 %	28 %
Change in earned net worth %	19 %	10 %	15 %	24 %	19 %
Solvency (end of year at market)					
Number of farms	47	5	14	13	12
Total assets	7,405,985	3,213,562	3,371,327	6,496,980	16,474,471
Total liabilities	1,959,385	595,222	849,437	2,127,291	4,098,066
Net worth	5,446,600	2,618,340	2,521,890	4,369,689	12,376,406
Total net worth change	863,961	487,645	288,186	752,862	2,018,133
Farm debt to asset ratio	27 %	19 %	27 %	34 %	25 %
Total debt to asset ratio	26 %	19 %	25 %	33 %	25 %
Change in total net worth %	19 %	23 %	13 %	21 %	19 %
Nonfarm Information					
Net nonfarm income	42,743	37,618	36,517	29,912	68,550
Farms reporting living expenses	5	1	2	-	2
Total family living expense	100,099	-	-	-	-
Total living, invest, cap. purch	254,743	-	-	-	-
Crop Acres					
Total crop acres	3,306	790	1,521	2,990	7,502
Total crop acres owned	756	193	456	902	1,339
Total crop acres cash rented	2,502	529	1,029	2,053	6,083
Total crop acres share rented	48	68	36	35	79
Machinery value per crop acre	476	611	428	474	483

Financial Summary
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2022
(Farms Sorted By Age of Operator)

	<u>Avg. Of All Farms</u>	<u>Less Than 31</u>	<u>31 - 40</u>	<u>41 - 50</u>	<u>51 - 60</u>	<u>Over 60</u>
Number of farms	47	5	9	7	16	10
Income Statement						
Gross cash farm income	1,874,060	633,352	1,858,700	1,980,792	1,913,130	2,371,015
Total cash farm expense	1,463,805	472,105	1,257,556	1,709,944	1,625,648	1,714,030
Net cash farm income	410,256	161,247	601,143	270,848	287,482	656,985
Inventory change	488,942	176,335	337,905	820,265	387,973	710,805
Depreciation	-148,302	-32,092	-124,193	-139,945	-140,168	-246,972
Net farm income from operations	750,895	305,489	814,855	951,168	535,286	1,120,818
Gain or loss on capital sales	18,846	402	35,921	18,330	12,748	22,820
Average net farm income	769,741	305,891	850,775	969,498	548,034	1,143,638
Median net farm income	433,647	310,993	600,865	537,684	446,588	201,114
Profitability (cost)						
Rate of return on assets	12.8 %	21.4 %	17.1 %	15.7 %	11.4 %	10.4 %
Rate of return on equity	17.4 %	28.5 %	29.9 %	26.1 %	16.6 %	11.7 %
Operating profit margin	30.4 %	30.8 %	33.8 %	32.9 %	24.1 %	33.6 %
Asset turnover rate	42.3 %	69.4 %	50.6 %	47.8 %	47.1 %	31.0 %
Profitability (market)						
Rate of return on assets	13.7 %	24.6 %	16.6 %	14.8 %	14.8 %	10.3 %
Rate of return on equity	17.4 %	32.2 %	26.3 %	22.3 %	19.7 %	11.4 %
Operating profit margin	39.6 %	38.2 %	37.4 %	36.1 %	43.2 %	39.4 %
Asset turnover rate	34.5 %	64.6 %	44.4 %	41.1 %	34.4 %	26.2 %
Liquidity & Repayment (end of year)						
Current assets	2,295,187	689,541	2,014,096	2,557,274	1,579,025	4,313,391
Current liabilities	745,651	146,320	874,100	1,096,354	613,661	895,406
Current ratio	3.08	4.71	2.30	2.33	2.57	4.82
Working capital	1,549,536	543,221	1,139,996	1,460,920	965,364	3,417,984
Change in working capital	392,205	122,908	253,967	533,057	271,384	745,985
Working capital to gross revenue	67.5 %	67.2 %	51.3 %	53.8 %	43.7 %	116.1 %
Working capital to oper expense	116.5 %	117.2 %	94.1 %	94.8 %	66.8 %	222.0 %
Debt coverage ratio	5.03	6.19	5.62	4.86	2.77	11.19
Term debt coverage ratio	5.54	6.20	5.76	5.46	3.07	12.53
Replacement coverage ratio	3.33	6.03	4.02	3.53	2.23	4.07
Term debt to EBITDA	1.06	0.43	1.22	1.35	1.67	0.34
Solvency (end of year at cost)						
Number of farms	47	5	9	7	16	10
Total assets	6,092,933	1,400,560	5,289,509	6,602,716	5,260,155	10,137,796
Total liabilities	1,959,385	380,899	2,421,673	2,828,274	2,142,720	1,431,012
Net worth	4,133,547	1,019,661	2,867,836	3,774,442	3,117,435	8,706,783
Net worth change	662,041	267,685	779,321	817,246	415,257	1,039,877
Farm debt to asset ratio	33 %	28 %	47 %	44 %	44 %	14 %
Total debt to asset ratio	32 %	27 %	46 %	43 %	41 %	14 %
Change in earned net worth %	19 %	36 %	37 %	28 %	15 %	14 %
Solvency (end of year at market)						
Number of farms	47	5	9	7	16	10
Total assets	7,405,985	1,517,817	5,959,484	7,575,137	7,138,064	11,962,188
Total liabilities	1,959,385	380,899	2,421,673	2,828,274	2,142,720	1,431,012
Net worth	5,446,600	1,136,918	3,537,810	4,746,863	4,995,344	10,531,175
Total net worth change	863,961	327,096	861,572	894,188	806,581	1,205,195
Farm debt to asset ratio	27 %	25 %	42 %	38 %	32 %	12 %
Total debt to asset ratio	26 %	25 %	41 %	37 %	30 %	12 %
Change in total net worth %	19 %	40 %	32 %	23 %	19 %	13 %
Nonfarm Information						
Net nonfarm income	42,743	13,672	110,540	34,161	28,329	25,330
Farms reporting living expenses	5	-	1	1	2	1
Total family living expense	100,099	-	-	-	-	-
Total living, invest, cap. purch	254,743	-	-	-	-	-
Crop Acres						
Total crop acres	3,306	1,361	3,276	3,881	3,072	4,277
Total crop acres owned	756	38	796	555	886	1,013
Total crop acres cash rented	2,502	1,323	2,480	3,301	2,157	3,102
Total crop acres share rented	48	-	-	26	29	162
Machinery value per crop acre	476	232	451	417	454	594

Financial Summary
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2022
(Farms Sorted By Farm Type)

	<u>Avg. Of All Farms</u>	<u>Crop</u>	<u>Beef</u>	<u>Crop and Beef</u>
Number of farms	47	33	5	5
Income Statement				
Gross cash farm income	1,874,060	2,178,540	462,743	718,490
Total cash farm expense	1,463,805	1,638,713	336,556	652,582
Net cash farm income	410,256	539,827	126,187	65,908
Inventory change	488,942	640,556	-46,235	159,088
Depreciation	-148,302	-179,737	-28,934	-57,187
Net farm income from operations	750,895	1,000,646	51,018	167,809
Gain or loss on capital sales	18,846	24,610	1,528	2,100
Average net farm income	769,741	1,025,256	52,546	169,908
Median net farm income	433,647	600,865	42,686	189,550
Profitability (cost)				
Rate of return on assets	12.8 %	14.2 %	2.5 %	6.2 %
Rate of return on equity	17.4 %	19.0 %	1.0 %	7.6 %
Operating profit margin	30.4 %	33.2 %	10.7 %	17.6 %
Asset turnover rate	42.3 %	42.8 %	23.5 %	35.3 %
Profitability (market)				
Rate of return on assets	13.7 %	14.8 %	6.5 %	14.2 %
Rate of return on equity	17.4 %	18.8 %	7.0 %	17.4 %
Operating profit margin	39.6 %	41.1 %	42.5 %	66.7 %
Asset turnover rate	34.5 %	36.0 %	15.3 %	21.4 %
Liquidity & Repayment (end of year)				
Current assets	2,295,187	2,890,369	333,036	813,269
Current liabilities	745,651	854,833	157,988	437,034
Current ratio	3.08	3.38	2.11	1.86
Working capital	1,549,536	2,035,537	175,048	376,234
Change in working capital	392,205	508,618	-14,100	57,378
Working capital to gross revenue	67.5 %	74.8 %	41.0 %	43.2 %
Working capital to oper expense	116.5 %	138.4 %	54.7 %	61.6 %
Debt coverage ratio	5.03	5.95	1.00	2.79
Term debt coverage ratio	5.54	6.47	1.00	3.12
Replacement coverage ratio	3.33	3.74	0.77	1.97
Term debt to EBITDA	1.06	0.92	3.56	1.72
Solvency (end of year at cost)				
Number of farms	47	33	5	5
Total assets	6,092,933	7,347,919	1,699,428	2,594,203
Total liabilities	1,959,385	2,217,520	529,888	978,347
Net worth	4,133,547	5,130,399	1,169,540	1,615,856
Net worth change	662,041	886,087	15,054	201,852
Farm debt to asset ratio	33 %	31 %	36 %	40 %
Total debt to asset ratio	32 %	30 %	31 %	38 %
Change in earned net worth %	19 %	21 %	1 %	14 %
Solvency (end of year at market)				
Number of farms	47	33	5	5
Total assets	7,405,985	8,687,292	2,525,355	4,194,955
Total liabilities	1,959,385	2,217,520	529,888	978,347
Net worth	5,446,600	6,469,772	1,995,468	3,216,609
Total net worth change	863,961	1,097,954	127,491	567,693
Farm debt to asset ratio	27 %	26 %	23 %	24 %
Total debt to asset ratio	26 %	26 %	21 %	23 %
Change in total net worth %	19 %	20 %	7 %	21 %
Nonfarm Information				
Net nonfarm income	42,743	45,326	32,710	38,182
Farms reporting living expenses	5	4	1	-
Total family living expense	100,099	-	-	-
Total living, invest, cap. purch	254,743	-	-	-
Crop Acres				
Total crop acres	3,306	4,030	779	1,554
Total crop acres owned	756	902	213	523
Total crop acres cash rented	2,502	3,081	566	893
Total crop acres share rented	48	48	-	138
Machinery value per crop acre	476	482	499	391

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 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. 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.

Coronavirus Food Assistance Program 3, a 2020 USDA FSA program that provides producers with financial assistance that gives them the ability to absorb some of the increased marketing costs associated with the COVID-19 pandemic, are included under "Other crop income per acre." "Government payments" are ARC and PLC payments as well as Coronavirus Food Assistance Program 1.

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

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

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

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

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2022
(Farms Sorted By Net Return)

Barley on Cash Rent

	<u>Avg. Of All Farms</u>
Number of farms	8
Acres	846.04
Yield per acre (bu.)	74.55
Operators share of yield %	100.00
Value per bu.	7.89
Other product return per acre	1.98
Total product return per acre	589.91
Crop insurance per acre	32.94
Other crop income per acre	2.89
Gross return per acre	625.74
Direct Expenses	
Seed and plants	39.46
Fertilizer	74.64
Crop chemicals	44.42
Crop insurance	34.91
Drying expense	0.81
Fuel & oil	17.19
Repairs	26.49
Custom hire	1.27
Land rent	84.10
Machinery leases	0.91
Operating interest	5.86
Miscellaneous	1.44
Total direct expenses per acre	331.50
Return over direct exp per acre	294.23
Overhead Expenses	
Custom hire	12.86
Hired labor	17.21
Machinery leases	1.64
Farm insurance	7.28
Utilities	5.09
Dues & professional fees	3.62
Interest	1.56
Mach & bldg depreciation	39.89
Miscellaneous	3.85
Total overhead expenses per acre	93.00
Total dir & ovhd expenses per acre	424.50
Net return per acre	201.23
Government payments	3.34
Net return with govt pmts	204.57
Labor & management charge	35.73
Net return over lbr & mgt	168.84
Cost of Production	
Total direct expense per bu.	4.45
Total dir & ovhd exp per bu.	5.69
Less govt & other income	5.14
With labor & management	5.62
Net value per unit	7.89
Machinery cost per acre	96.65
Est. labor hours per acre	1.03

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central Northd Dakota, 2022
(Farms Sorted By Net Return)

Beans, Pinto on Cash Rent

	<u>Avg. Of All Farms</u>
Number of farms	6
Acres	676.98
Yield per acre (cwt.)	13.30
Operators share of yield %	100.00
Value per cwt.	40.07
Total product return per acre	532.97
Crop insurance per acre	18.77
Other crop income per acre	7.76
Gross return per acre	559.50
Direct Expenses	
Seed and plants	59.51
Fertilizer	41.83
Crop chemicals	77.81
Crop insurance	43.29
Fuel & oil	17.47
Repairs	32.37
Land rent	92.10
Machinery leases	1.64
Operating interest	9.96
Miscellaneous	2.73
Total direct expenses per acre	378.71
Return over direct exp per acre	180.79
Overhead Expenses	
Custom hire	16.53
Hired labor	19.79
Machinery leases	11.49
Farm insurance	6.58
Utilities	5.13
Dues & professional fees	1.05
Interest	2.05
Mach & bldg depreciation	44.72
Miscellaneous	4.79
Total overhead expenses per acre	112.12
Total dir & ovhd expenses per acre	490.83
Net return per acre	68.67
Government payments	-
Net return with govt pmts	68.67
Labor & management charge	47.44
Net return over lbr & mgt	21.23
Cost of Production	
Total direct expense per cwt.	28.47
Total dir & ovhd exp per cwt.	36.90
Less govt & other income	34.91
With labor & management	38.47
Net value per unit	40.07
Machinery cost per acre	121.80
Est. labor hours per acre	1.23

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central Northd Dakota, 2022
(Farms Sorted By Net Return)

Corn on Owned Land

	Avg. Of All Farms
Number of farms	18
Acres	263.21
Yield per acre (bu.)	136.65
Operators share of yield %	100.00
Value per bu.	6.20
Total product return per acre	847.49
Crop insurance per acre	4.50
Other crop income per acre	2.71
Gross return per acre	854.69
Direct Expenses	
Seed and plants	85.23
Fertilizer	139.48
Crop chemicals	39.08
Crop insurance	26.19
Drying expense	4.24
Fuel & oil	26.17
Repairs	52.25
Custom hire	6.06
Machinery leases	0.13
Operating interest	7.85
Miscellaneous	1.11
Total direct expenses per acre	387.80
Return over direct exp per acre	466.90
Overhead Expenses	
Custom hire	5.37
Hired labor	16.69
Machinery leases	4.12
RE & pers. property taxes	9.33
Farm insurance	7.23
Utilities	4.43
Dues & professional fees	1.40
Interest	57.92
Mach & bldg depreciation	65.14
Miscellaneous	9.68
Total overhead expenses per acre	181.32
Total dir & ovhd expenses per acre	569.12
Net return per acre	285.57
Government payments	4.93
Net return with govt pmts	290.50
Labor & management charge	57.89
Net return over lbr & mgt	232.62
Cost of Production	
Total direct expense per bu.	2.84
Total dir & ovhd exp per bu.	4.16
Less govt & other income	4.08
With labor & management	4.50
Net value per unit	6.20
Machinery cost per acre	159.13
Est. labor hours per acre	1.67

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2022
(Farms Sorted By Net Return)

Corn on Cash Rent

	<u>Ava. Of</u> <u>All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	22	5	5
Acres	777.70	379.86	357.43
Yield per acre (bu.)	128.82	115.58	176.05
Operators share of yield %	100.00	100.00	100.00
Value per bu.	6.32	6.38	6.41
Other product return per acre	1.56	-	-
Total product return per acre	815.85	737.90	1,129.21
Crop insurance per acre	7.34	41.17	-
Other crop income per acre	3.01	3.47	-
Gross return per acre	826.20	782.54	1,129.21
Direct Expenses			
Seed and plants	83.48	94.81	96.33
Fertilizer	136.25	148.74	181.53
Crop chemicals	37.89	39.44	35.31
Crop insurance	30.02	30.84	28.02
Drying expense	0.84	-	1.63
Fuel & oil	26.95	25.04	27.67
Repairs	41.82	32.85	45.01
Custom hire	3.80	14.20	14.28
Land rent	81.94	66.55	80.73
Machinery leases	0.78	1.04	-
Marketing	0.14	1.28	-
Operating interest	8.95	14.60	5.54
Miscellaneous	1.14	1.36	-
Total direct expenses per acre	454.00	470.75	516.05
Return over direct exp per acre	372.20	311.79	613.16
Overhead Expenses			
Custom hire	5.35	0.25	0.38
Hired labor	29.39	8.61	17.96
Machinery leases	5.74	1.54	0.23
Farm insurance	7.39	12.84	4.76
Utilities	4.50	2.72	4.56
Dues & professional fees	3.02	0.80	2.29
Interest	2.43	2.51	3.87
Mach & bldg depreciation	65.48	80.05	57.98
Miscellaneous	6.16	9.01	10.35
Total overhead expenses per acre	129.46	118.34	102.38
Total dir & ovhd expenses per acre	583.46	589.09	618.43
Net return per acre	242.74	193.44	510.78
Government payments	5.79	5.81	0.15
Net return with govt pmts	248.53	199.25	510.93
Labor & management charge	59.52	63.17	59.25
Net return over lbr & mgt	189.01	136.08	451.68
Cost of Production			
Total direct expense per bu.	3.52	4.07	2.93
Total dir & ovhd exp per bu.	4.53	5.10	3.51
Less govt & other income	4.39	4.66	3.51
With labor & management	4.85	5.21	3.85
Net value per unit	6.32	6.38	6.41
Machinery cost per acre	145.12	154.56	138.69
Est. labor hours per acre	1.64	1.74	1.81

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central Northd Dakota, 2022
(Farms Sorted By Net Return)

Corn Silage on Owned Land

	Avg. Of All Farms
Number of farms	5
Acres	81.65
Yield per acre (ton)	13.58
Operators share of yield %	100.00
Value per ton	34.60
Total product return per acre	470.03
Gross return per acre	470.03
Direct Expenses	
Seed and plants	90.04
Fertilizer	116.67
Crop chemicals	49.28
Crop insurance	22.79
Fuel & oil	25.79
Repairs	43.80
Custom hire	84.55
Operating interest	11.19
Miscellaneous	0.84
Total direct expenses per acre	444.95
Return over direct exp per acre	25.07
Overhead Expenses	
Custom hire	3.36
Hired labor	10.01
RE & pers. property taxes	7.25
Farm insurance	4.08
Utilities	4.20
Dues & professional fees	1.02
Interest	14.81
Mach & bldg depreciation	50.72
Miscellaneous	16.93
Advertising & promotion	0.12
Total overhead expenses per acre	112.50
Total dir & ovhd expenses per acre	557.45
Net return per acre	-87.42
Government payments	4.05
Net return with govt pmts	-83.37
Labor & management charge	41.49
Net return over lbr & mgt	-124.86
Cost of Production	
Total direct expense per ton	32.76
Total dir & ovhd exp per ton	41.04
Less govt & other income	40.74
With labor & management	43.80
Net value per unit	34.60
Machinery cost per acre	204.20
Est. labor hours per acre	2.03

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central Northd Dakota, 2022
(Farms Sorted By Net Return)

Corn Silage on Cash Rent

	<u>Avg. Of All Farms</u>
Number of farms	6
Acres	60.83
Yield per acre (ton)	11.70
Operators share of yield %	100.00
Value per ton	39.03
Total product return per acre	456.78
Crop insurance per acre	8.96
Gross return per acre	465.74
Direct Expenses	
Seed and plants	87.72
Fertilizer	111.37
Crop chemicals	45.15
Crop insurance	19.17
Fuel & oil	19.88
Repairs	26.83
Custom hire	63.76
Land rent	52.94
Operating interest	5.94
Miscellaneous	0.63
Total direct expenses per acre	433.39
Return over direct exp per acre	32.35
Overhead Expenses	
Custom hire	1.34
Hired labor	12.53
Machinery leases	1.07
Farm insurance	4.50
Utilities	4.02
Dues & professional fees	2.61
Interest	1.21
Mach & bldg depreciation	47.26
Miscellaneous	7.46
Total overhead expenses per acre	82.00
Total dir & ovhd expenses per acre	515.40
Net return per acre	-49.66
Government payments	2.50
Net return with govt pmts	-47.16
Labor & management charge	38.56
Net return over lbr & mgt	-85.72
Cost of Production	
Total direct expense per ton	37.03
Total dir & ovhd exp per ton	44.04
Less govt & other income	43.06
With labor & management	46.36
Net value per unit	39.03
Machinery cost per acre	154.51
Est. labor hours per acre	1.51

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central Northd Dakota, 2022
(Farms Sorted By Net Return)

CRP on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	5
Acres	101.50
Gross return per acre	81.63
Direct Expenses	
Fuel & oil	1.50
Repairs	2.35
Miscellaneous	0.04
Total direct expenses per acre	3.90
Return over direct exp per acre	77.74
Overhead Expenses	
Hired labor	0.79
RE & pers. property taxes	8.34
Farm insurance	0.38
Utilities	0.53
Dues & professional fees	0.25
Interest	40.02
Mach & bldg depreciation	3.02
Miscellaneous	0.95
Total overhead expenses per acre	54.29
Total dir & ovhd expenses per acre	58.18
Net return per acre	23.45
Government payments	-
Net return with govt pmts	23.45
Labor & management charge	2.36
Net return over lbr & mgt	21.09
Net value per unit	1.00
Machinery cost per acre	6.63
Est. labor hours per acre	0.10

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2022
(Farms Sorted By Net Return)

Hay, Grass on Cash Rent

	<u>Avg. Of All Farms</u>
Number of farms	5
Acres	521.20
Yield per acre (ton)	1.78
Operators share of yield %	100.00
Value per ton	73.71
Total product return per acre	130.84
Gross return per acre	130.84
Direct Expenses	
Seed and plants	1.96
Fertilizer	2.67
Crop chemicals	1.80
Fuel & oil	13.21
Repairs	23.22
Custom hire	0.66
Land rent	25.85
Operating interest	2.94
Total direct expenses per acre	72.31
Return over direct exp per acre	58.53
Overhead Expenses	
Custom hire	0.10
Hired labor	8.62
Machinery leases	0.75
Farm insurance	1.64
Utilities	1.93
Dues & professional fees	1.42
Interest	0.79
Mach & bldg depreciation	15.81
Miscellaneous	10.36
Total overhead expenses per acre	41.42
Total dir & ovhd expenses per acre	113.73
Net return per acre	17.11
Government payments	0.65
Net return with govt pmts	17.76
Labor & management charge	19.91
Net return over lbr & mgt	-2.16
Cost of Production	
Total direct expense per ton	40.74
Total dir & ovhd exp per ton	64.07
Less govt & other income	63.70
With labor & management	74.92
Net value per unit	73.71
Machinery cost per acre	52.16
Est. labor hours per acre	0.83

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central Northd Dakota, 2022
(Farms Sorted By Net Return)

Pasture on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	10
Acres	638.69
Yield per acre (aum)	0.99
Operators share of yield %	100.00
Value per aum	23.76
Total product return per acre	23.54
Crop insurance per acre	0.48
Other crop income per acre	1.64
Gross return per acre	25.67
 Direct Expenses	
Fuel & oil	0.57
Repairs	1.07
Miscellaneous	0.61
Total direct expenses per acre	2.26
Return over direct exp per acre	23.41
 Overhead Expenses	
RE & pers. property taxes	3.28
Farm insurance	0.33
Interest	6.71
Mach & bldg depreciation	1.07
Miscellaneous	1.27
Total overhead expenses per acre	12.66
Total dir & ovhd expenses per acre	14.91
Net return per acre	10.75
Government payments	-
Net return with govt pmts	10.75
Labor & management charge	0.92
Net return over lbr & mgt	9.83
 Cost of Production	
Total direct expense per aum	2.28
Total dir & ovhd exp per aum	15.05
Less govt & other income	12.91
With labor & management	13.84
Net value per unit	23.76
Machinery cost per acre	2.83
Est. labor hours per acre	0.05

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central Northd Dakota, 2022
(Farms Sorted By Net Return)

Pasture on Cash Rent

	Avg. Of All Farms
Number of farms	10
Acres	1,378.94
Yield per acre (aum)	1.07
Operators share of yield %	100.00
Value per aum	24.57
Total product return per acre	26.25
Other crop income per acre	0.39
Gross return per acre	26.64
Direct Expenses	
Crop insurance	0.31
Fuel & oil	0.63
Repairs	0.92
Land rent	22.82
Miscellaneous	0.09
Total direct expenses per acre	24.77
Return over direct exp per acre	1.87
Overhead Expenses	
Hired labor	0.47
Mach & bldg depreciation	1.22
Miscellaneous	1.08
Total overhead expenses per acre	2.77
Total dir & ovhd expenses per acre	27.54
Net return per acre	-0.90
Government payments	-
Net return with govt pmts	-0.90
Labor & management charge	1.12
Net return over lbr & mgt	-2.01
Cost of Production	
Total direct expense per aum	23.18
Total dir & ovhd exp per aum	25.77
Less govt & other income	25.41
With labor & management	26.45
Net value per unit	24.57
Machinery cost per acre	2.76
Est. labor hours per acre	0.04

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central Northd Dakota, 2022
(Farms Sorted By Net Return)

Prevented planting on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	8
Acres	145.65
Yield per acre	-
Operators share of yield %	-
Value per 0	-
Other product return per acre	0.96
Total product return per acre	0.96
Crop insurance per acre	298.23
Other crop income per acre	3.17
Gross return per acre	302.37
Direct Expenses	
Seed and plants	9.36
Fertilizer	7.37
Crop chemicals	28.32
Crop insurance	25.89
Fuel & oil	10.35
Repairs	16.63
Custom hire	0.84
Operating interest	2.56
Miscellaneous	2.01
Total direct expenses per acre	103.34
Return over direct exp per acre	199.03
Overhead Expenses	
Hired labor	2.86
Machinery leases	0.42
RE & pers. property taxes	10.10
Farm insurance	9.26
Utilities	4.84
Dues & professional fees	1.81
Interest	55.06
Mach & bldg depreciation	15.69
Miscellaneous	11.82
Total overhead expenses per acre	111.86
Total dir & ovhd expenses per acre	215.20
Net return per acre	87.17
Government payments	2.06
Net return with govt pmts	89.23
Labor & management charge	22.41
Net return over lbr & mgt	66.82
Net value per unit	-
Machinery cost per acre	48.25
Est. labor hours per acre	0.85

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central Northd Dakota, 2022
(Farms Sorted By Net Return)

Prevented planting on Cash Rent

	<u>Avg. Of All Farms</u>
Number of farms	15
Acres	239.10
Yield per acre	0.00
Operators share of yield %	100.00
Value per 0	1.00
Other product return per acre	1.31
Total product return per acre	1.31
Crop insurance per acre	318.44
Other crop income per acre	1.45
Gross return per acre	321.21
Direct Expenses	
Seed and plants	5.46
Fertilizer	1.09
Crop chemicals	6.78
Crop insurance	33.46
Fuel & oil	7.11
Repairs	8.95
Custom hire	0.49
Land rent	71.72
Operating interest	1.51
Miscellaneous	0.54
Total direct expenses per acre	137.10
Return over direct exp per acre	184.10
Overhead Expenses	
Custom hire	3.85
Hired labor	3.18
Machinery leases	3.86
Farm insurance	5.49
Utilities	3.44
Dues & professional fees	1.54
Interest	2.01
Mach & bldg depreciation	14.22
Miscellaneous	5.71
Total overhead expenses per acre	43.30
Total dir & ovhd expenses per acre	180.40
Net return per acre	140.81
Government payments	1.88
Net return with govt pmts	142.69
Labor & management charge	19.38
Net return over lbr & mgt	123.31
Net value per unit	1.00
Machinery cost per acre	39.21
Est. labor hours per acre	0.69

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central Northd Dakota, 2022
(Farms Sorted By Net Return)

Soybeans on Owned Land

	<u>Avg. Of All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	24	5	5
Acres	458.83	532.98	511.36
Yield per acre (bu.)	35.65	32.38	42.73
Operators share of yield %	100.00	100.00	100.00
Value per bu.	13.80	13.97	13.67
Total product return per acre	491.79	452.42	584.15
Crop insurance per acre	9.55	4.15	-
LDP income per acre	0.37	-	-
Other crop income per acre	3.50	2.59	-
Gross return per acre	505.21	459.16	584.15
Direct Expenses			
Seed and plants	63.10	62.24	51.99
Fertilizer	15.91	16.10	13.81
Crop chemicals	46.47	37.90	44.96
Crop insurance	25.51	25.16	13.68
Fuel & oil	16.64	13.21	17.11
Repairs	34.50	21.83	39.60
Custom hire	2.75	-	2.37
Machinery leases	0.46	0.33	-
Operating interest	4.53	3.74	2.31
Miscellaneous	1.27	1.22	-
Total direct expenses per acre	211.14	181.73	185.83
Return over direct exp per acre	294.07	277.43	398.32
Overhead Expenses			
Custom hire	1.85	3.42	0.08
Hired labor	8.70	6.50	12.75
Machinery leases	1.73	0.10	1.61
RE & pers. property taxes	9.68	7.66	13.68
Farm insurance	7.76	5.53	5.70
Utilities	4.16	3.31	4.39
Dues & professional fees	1.77	1.10	0.91
Interest	50.77	46.32	58.04
Mach & bldg depreciation	41.34	41.28	39.22
Miscellaneous	8.34	4.26	10.18
Total overhead expenses per acre	136.10	119.47	146.56
Total dir & ovhd expenses per acre	347.24	301.20	332.39
Net return per acre	157.97	157.95	251.75
Government payments	3.78	6.17	5.28
Net return with govt pmts	161.76	164.13	257.04
Labor & management charge	37.24	33.85	36.19
Net return over lbr & mgt	124.52	130.27	220.85
Cost of Production			
Total direct expense per bu.	5.92	5.61	4.35
Total dir & ovhd exp per bu.	9.74	9.30	7.78
Less govt & other income	9.26	8.90	7.65
With labor & management	10.30	9.95	8.50
Net value per unit	13.81	13.97	13.67
Machinery cost per acre	100.16	75.68	103.29
Est. labor hours per acre	1.04	0.94	0.92

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2022
(Farms Sorted By Net Return)

Soybeans on Cash Rent

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	31	6	6	7
Acres	962.24	678.38	728.27	1,649.85
Yield per acre (bu.)	35.49	25.28	31.29	42.92
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	13.84	13.89	13.56	13.90
Total product return per acre	491.14	351.12	424.28	596.41
Crop insurance per acre	9.08	16.13	3.12	5.36
LDP income per acre	0.93	-	6.38	-
Other crop income per acre	2.12	7.60	-	-
Gross return per acre	503.27	374.85	433.78	601.77
Direct Expenses				
Seed and plants	60.36	66.98	52.43	62.48
Fertilizer	15.70	11.74	10.33	20.93
Crop chemicals	44.18	40.76	41.04	44.15
Crop insurance	22.31	23.57	18.17	21.60
Fuel & oil	15.71	13.33	16.44	16.92
Repairs	26.64	36.51	24.46	24.07
Custom hire	2.15	4.51	1.76	2.37
Land rent	69.89	60.32	56.57	82.23
Machinery leases	0.57	1.85	-	-
Operating interest	4.57	7.54	0.35	3.23
Miscellaneous	1.12	2.38	1.20	0.31
Total direct expenses per acre	263.19	269.48	222.76	278.29
Return over direct exp per acre	240.08	105.36	211.03	323.48
Overhead Expenses				
Custom hire	2.09	9.16	0.88	0.04
Hired labor	12.52	7.69	9.80	16.80
Machinery leases	2.19	6.13	2.04	1.42
Farm insurance	7.00	6.07	5.34	7.16
Utilities	3.94	4.02	3.37	4.33
Dues & professional fees	2.85	3.80	2.27	4.54
Interest	2.55	4.20	0.96	2.08
Mach & bldg depreciation	41.89	25.30	44.95	47.87
Miscellaneous	6.74	5.04	6.87	5.25
Total overhead expenses per acre	81.77	71.41	76.48	89.50
Total dir & ovhd expenses per acre	344.96	340.90	299.24	367.79
Net return per acre	158.31	33.95	134.54	233.98
Government payments	3.98	4.77	0.88	1.45
Net return with govt pmts	162.29	38.72	135.42	235.42
Labor & management charge	36.79	30.41	35.26	37.58
Net return over lbr & mgt	125.50	8.31	100.16	197.84
Cost of Production				
Total direct expense per bu.	7.42	10.66	7.12	6.48
Total dir & ovhd exp per bu.	9.72	13.48	9.56	8.57
Less govt & other income	9.27	12.36	9.23	8.41
With labor & management	10.30	13.56	10.36	9.29
Net value per unit	13.87	13.89	13.76	13.90
Machinery cost per acre	89.07	97.70	84.84	88.84
Est. labor hours per acre	0.98	0.81	1.06	0.92

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central Northd Dakota, 2022
(Farms Sorted By Net Return)

Sunflowers on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	8
Acres	248.78
Yield per acre (cwt.)	24.04
Operators share of yield %	100.00
Value per cwt.	27.45
Total product return per acre	659.90
Crop insurance per acre	2.17
Other crop income per acre	1.58
Gross return per acre	663.65
Direct Expenses	
Seed and plants	37.10
Fertilizer	73.49
Crop chemicals	51.80
Crop insurance	21.94
Drying expense	1.76
Fuel & oil	18.02
Repairs	32.27
Custom hire	11.61
Operating interest	0.57
Miscellaneous	0.12
Total direct expenses per acre	248.69
Return over direct exp per acre	414.96
Overhead Expenses	
Custom hire	1.76
Hired labor	12.68
Machinery leases	1.11
RE & pers. property taxes	6.89
Farm insurance	6.24
Utilities	3.31
Dues & professional fees	1.75
Interest	8.12
Mach & bldg depreciation	49.95
Miscellaneous	8.89
Total overhead expenses per acre	100.70
Total dir & ovhd expenses per acre	349.40
Net return per acre	314.25
Government payments	2.51
Net return with govt pmts	316.76
Labor & management charge	42.61
Net return over lbr & mgt	274.15
Cost of Production	
Total direct expense per cwt.	10.35
Total dir & ovhd exp per cwt.	14.53
Less govt & other income	14.27
With labor & management	16.05
Net value per unit	27.45
Machinery cost per acre	108.47
Est. labor hours per acre	1.38

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central Northd Dakota, 2022
(Farms Sorted By Net Return)

Sunflowers on Cash Rent

	<u>Avg. Of All Farms</u>
Number of farms	8
Acres	628.70
Yield per acre (cwt.)	24.71
Operators share of yield %	100.00
Value per cwt.	29.00
Total product return per acre	716.56
Crop insurance per acre	0.41
Other crop income per acre	1.24
Gross return per acre	718.21
Direct Expenses	
Seed and plants	36.96
Fertilizer	72.38
Crop chemicals	60.98
Crop insurance	25.71
Drying expense	0.98
Fuel & oil	21.67
Repairs	32.73
Custom hire	12.69
Land rent	70.53
Operating interest	1.16
Miscellaneous	1.22
Total direct expenses per acre	337.01
Return over direct exp per acre	381.21
Overhead Expenses	
Custom hire	0.09
Hired labor	16.60
Machinery leases	3.08
Building leases	0.34
Farm insurance	6.17
Utilities	4.19
Dues & professional fees	4.00
Interest	0.67
Mach & bldg depreciation	56.10
Miscellaneous	5.57
Total overhead expenses per acre	96.80
Total dir & ovhd expenses per acre	433.81
Net return per acre	284.40
Government payments	0.94
Net return with govt pmts	285.35
Labor & management charge	44.95
Net return over lbr & mgt	240.40
Cost of Production	
Total direct expense per cwt.	13.64
Total dir & ovhd exp per cwt.	17.56
Less govt & other income	17.45
With labor & management	19.27
Net value per unit	29.00
Machinery cost per acre	119.18
Est. labor hours per acre	1.19

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2022
(Farms Sorted By Net Return)

Wheat, Durum on Cash Rent

	<u>Avg. Of All Farms</u>
Number of farms	6
Acres	505.67
Yield per acre (bu.)	45.60
Operators share of yield %	100.00
Value per bu.	11.65
Other product return per acre	7.12
Total product return per acre	538.23
Crop insurance per acre	26.06
Gross return per acre	564.30
Direct Expenses	
Seed and plants	47.96
Fertilizer	96.22
Crop chemicals	51.18
Crop insurance	20.44
Fuel & oil	13.78
Repairs	31.73
Land rent	57.35
Operating interest	4.46
Miscellaneous	1.52
Total direct expenses per acre	324.63
Return over direct exp per acre	239.66
Overhead Expenses	
Custom hire	7.96
Hired labor	6.18
Machinery leases	5.67
Building leases	0.34
Farm insurance	4.06
Utilities	2.97
Dues & professional fees	4.78
Interest	3.76
Mach & bldg depreciation	28.87
Miscellaneous	4.40
Total overhead expenses per acre	68.99
Total dir & ovhd expenses per acre	393.62
Net return per acre	170.67
Government payments	0.58
Net return with govt pmts	171.26
Labor & management charge	33.48
Net return over lbr & mgt	137.78
Cost of Production	
Total direct expense per bu.	7.12
Total dir & ovhd exp per bu.	8.63
Less govt & other income	7.89
With labor & management	8.63
Net value per unit	11.65
Machinery cost per acre	89.45
Est. labor hours per acre	0.88

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central Northd Dakota, 2022
(Farms Sorted By Net Return)

Wheat, Spring on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	17
Acres	428.58
Yield per acre (bu.)	60.44
Operators share of yield %	100.00
Value per bu.	8.89
Total product return per acre	537.20
Crop insurance per acre	1.79
Other crop income per acre	1.46
Gross return per acre	540.45
Direct Expenses	
Seed and plants	23.80
Fertilizer	114.12
Crop chemicals	43.91
Crop insurance	21.01
Drying expense	0.75
Fuel & oil	16.30
Repairs	29.57
Custom hire	0.89
Machinery leases	0.10
Operating interest	2.18
Miscellaneous	1.23
Total direct expenses per acre	253.89
Return over direct exp per acre	286.57
Overhead Expenses	
Custom hire	0.70
Hired labor	11.20
Machinery leases	1.27
RE & pers. property taxes	9.23
Farm insurance	6.54
Utilities	3.75
Dues & professional fees	1.75
Interest	30.06
Mach & bldg depreciation	44.87
Miscellaneous	7.87
Total overhead expenses per acre	117.24
Total dir & ovhd expenses per acre	371.12
Net return per acre	169.33
Government payments	3.14
Net return with govt pmts	172.47
Labor & management charge	35.85
Net return over lbr & mgt	136.62
Cost of Production	
Total direct expense per bu.	4.20
Total dir & ovhd exp per bu.	6.14
Less govt & other income	6.04
With labor & management	6.63
Net value per unit	8.89
Machinery cost per acre	90.34
Est. labor hours per acre	1.08

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central Northd Dakota, 2022
(Farms Sorted By Net Return)

Wheat, Spring on Cash Rent

	<u>Avg. Of All Farms</u>	<u>High 20%</u>
Number of farms	21	5
Acres	933.72	1,019.40
Yield per acre (bu.)	62.75	67.81
Operators share of yield %	100.00	100.00
Value per bu.	8.93	9.72
Total product return per acre	560.58	658.94
Crop insurance per acre	1.69	0.09
Other crop income per acre	4.15	8.80
Gross return per acre	566.42	667.83
Direct Expenses		
Seed and plants	26.38	26.74
Fertilizer	113.73	94.03
Crop chemicals	51.06	51.39
Crop insurance	22.25	22.77
Fuel & oil	14.81	14.44
Repairs	29.42	28.83
Custom hire	0.86	2.28
Land rent	67.19	70.39
Machinery leases	0.87	2.67
Operating interest	3.25	5.17
Miscellaneous	1.90	3.14
Total direct expenses per acre	331.72	321.85
Return over direct exp per acre	234.70	345.98
Overhead Expenses		
Custom hire	1.39	0.07
Hired labor	12.07	20.83
Machinery leases	1.95	2.65
Farm insurance	6.11	6.07
Utilities	3.77	5.02
Dues & professional fees	0.97	0.33
Interest	2.37	2.36
Mach & bldg depreciation	39.87	31.89
Miscellaneous	8.50	7.65
Total overhead expenses per acre	77.00	76.86
Total dir & ovhd expenses per acre	408.72	398.71
Net return per acre	157.69	269.12
Government payments	7.05	15.98
Net return with govt pmts	164.75	285.10
Labor & management charge	38.59	36.84
Net return over lbr & mgt	126.16	248.26
Cost of Production		
Total direct expense per bu.	5.29	4.75
Total dir & ovhd exp per bu.	6.51	5.88
Less govt & other income	6.31	5.51
With labor & management	6.92	6.06
Net value per unit	8.93	9.72
Machinery cost per acre	86.82	81.76
Est. labor hours per acre	1.03	1.04

EXPLANATORY NOTES FOR LIVESTOCK TABLES

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

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

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

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

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

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

Livestock Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2022
(Farms Sorted By Net Return)

Beef Cow-Calf -- Average Per Cwt. Produced

	<u>Avg. Of All Farms</u>	
Number of farms	8	
	Quantity	Value
Beef Calves sold (lb)	56.58	104.30
Transferred out (lb)	74.83	146.60
Cull sales (lb)	5.28	39.01
Insurance income		0.06
Government payments		0.73
Other income		4.87
Purchased (lb)	-	-30.66
Transferred in (lb)	-35.28	-79.62
Inventory change (lb)	-1.40	64.89
Gross margin		250.19
Direct Expenses		
Protein Vit Minerals (lb.)	31.96	6.85
Corn Silage (lb.)	1,510.58	26.79
Hay, Alfalfa (lb.)	222.60	9.98
Hay, Grass (lb.)	818.68	33.93
Oatlage (lb.)	280.22	3.50
Pasture (aum)	1.28	30.53
Straw (lb.)	99.19	1.66
Hay (lb.)	441.48	16.55
Other feed stuffs (lb)	206.99	10.53
Veterinary		8.95
Supplies		2.09
Fuel & oil		8.03
Repairs		11.21
Miscellaneous		7.94
Total direct expenses		178.55
Return over direct expense		71.64
Overhead Expenses		
Hired labor		8.78
Farm insurance		4.05
Utilities		2.51
Dues & professional fees		2.27
Mach & bldg depreciation		12.77
Miscellaneous		7.76
Total overhead expenses		38.14
Total dir & ovhd expenses		216.69
Net return		33.50
Labor & management charge		23.68
Net return over lbr & mgt		9.82
Cost of Production Per Cwt. Produced		
Total direct expense per unit		178.55
Total dir & ovhd expense per unit		216.69
With other revenue adjustments		227.86
With labor and management		251.54
Est. labor hours per unit		1.01
Other Information		
Number of cows		298.8
Pregnancy percentage		97.4
Pregnancy loss percentage		2.0
Culling percentage		14.2
Calving percentage		95.5
Weaning percentage		87.5
Calves sold per cow		0.87
Calf death loss percent		6.5
Cow death loss percent		1.1
Cows per FTE		745.2
Average weaning weight		531
Lb. weaned/exposed female		465
Feed cost per cow		521.59
Avg wgt/ Beef Calves sold		590
Avg price / cwt.		184.36

Livestock Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2022
(Farms Sorted By Net Return)

Beef Cow-Calf -- Average Per Cow

	<u>Avg. Of All Farms</u>	
Number of farms		8
	Quantity	Value
Beef Calves sold (lb)	210.3	387.69
Transferred out (lb)	278.1	544.90
Cull sales (lb)	19.6	144.98
Insurance income		0.23
Government payments		2.73
Other income		18.10
Purchased (lb)	-	-113.95
Transferred in (lb)	-131.1	-295.94
Inventory change (lb)	-5.2	241.20
Gross margin		929.94
Direct Expenses		
Protein Vit Minerals (lb.)	118.8	25.47
Corn Silage (lb.)	5,614.6	99.59
Hay, Alfalfa (lb.)	827.4	37.10
Hay, Grass (lb.)	3,042.9	126.10
Oatlage (lb.)	1,041.5	13.02
Pasture (aum)	4.7	113.48
Hay (lb.)	1,640.9	61.52
Other feed stuffs (lb)	1,138.0	45.30
Veterinary		33.28
Fuel & oil		29.86
Repairs		41.65
Hired labor		3.16
Marketing		8.37
Miscellaneous		25.75
Total direct expenses		663.67
Return over direct expense		266.27
Overhead Expenses		
Hired labor		32.63
Farm insurance		15.06
Dues & professional fees		8.45
Mach & bldg depreciation		47.48
Miscellaneous		38.16
Total overhead expenses		141.76
Total dir & ovhd expenses		805.43
Net return		124.51
Labor & management charge		88.01
Net return over lbr & mgt		36.50
Cost of Production Per Cwt. Produced		
Total direct expense per unit		178.55
Total dir & ovhd expense per unit		216.69
With other revenue adjustments		227.86
With labor and management		251.54
Est. labor hours per unit		3.76
Other Information		
Number of cows		298.8
Pregnancy percentage		97.4
Pregnancy loss percentage		2.0
Culling percentage		14.2
Calving percentage		95.5
Weaning percentage		87.5
Calves sold per cow		0.87
Calf death loss percent		6.5
Cow death loss percent		1.1
Cows per FTE		745.2
Average weaning weight		531
Lb. weaned/exposed female		465
Feed cost per cow		521.59
Avg wgt/ Beef Calves sold		590
Avg price / cwt.		184.36

Livestock Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2022
(Farms Sorted By Net Return)

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

	<u>Avg. Of All Farms</u>	
Number of farms	6	
	Quantity	Value
Backgnd Beef sold (lb)	232.85	359.02
Transferred out (lb)	49.62	87.05
Purchased (lb)	-67.62	-124.35
Transferred in (lb)	-175.25	-337.66
Inventory change (lb)	60.40	139.96
Gross margin		124.03
Direct Expenses		
Midds (lb.)	167.27	12.44
Barley (bu.)	0.34	1.85
Corn (bu.)	1.16	6.14
Corn Silage (lb.)	525.34	16.37
Corn, Ear (lb.)	70.45	3.70
Hay, Grass (lb.)	183.41	6.51
Pasture (aum)	0.14	2.39
Screenings, Heavy (lb.)	39.99	3.60
DDGS, dry (lb.)	14.01	0.98
DDGS, wet (lb.)	72.12	5.60
Other feed stuffs (lb)	425.53	15.74
Veterinary		3.17
Fuel & oil		3.06
Repairs		4.44
Miscellaneous		4.50
Total direct expenses		90.49
Return over direct expense		33.54
Overhead Expenses		
Custom hire		0.29
Hired labor		4.55
Mach & bldg depreciation		4.46
Miscellaneous		5.78
Total overhead expenses		15.07
Total dir & ovhd expenses		105.56
Net return		18.47
Labor & management charge		8.41
Net return over lbr & mgt		10.06
Cost of Production Per Cwt. Produced		
Total direct expense per unit		146.04
Total dir & ovhd expense per unit		151.38
With other revenue adjustments		151.38
With labor and management		154.36
Est. labor hours per unit		0.32
Other Information		
No. purchased or trans in		281
Number sold or trans out		225
Percentage death loss		0.7
Avg. daily gain (lb.)		1.48
Lb. of conc / lb. of gain		5.26
Lb. of feed / lb. of gain		12.22
Feed cost per cwt. of gain		75.32
Feed cost per head		127.20
Hired labor per head		7.68
Average purchase weight		581
Avg wgt / Backgnd Beef sold		770
Avg purch price / cwt.		183.89
Avg sales price / cwt.		154.18

Livestock Enterprise Analysis
North Dakota Farm Business Management Education Program
Region 3 - South Central North Dakota, 2022
(Farms Sorted By Net Return)

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

	Avg. Of All Farms	
Number of farms	6	
	Quantity	Value
Backgnd Beef sold (lb)	393.2	606.31
Transferred out (lb)	83.8	147.01
Purchased (lb)	-114.2	-210.00
Transferred in (lb)	-296.0	-570.23
Inventory change (lb)	102.0	236.36
Gross margin		209.46
Direct Expenses		
Midds (lb.)	282.5	21.01
Barley (bu.)	0.6	3.13
Corn (bu.)	2.0	10.37
Corn Silage (lb.)	887.2	27.64
Corn, Ear (lb.)	119.0	6.25
Hay, Grass (lb.)	309.7	10.99
Pasture (aum)	0.2	4.03
Straw (lb.)	277.3	5.14
Screenings, Heavy (lb.)	67.5	6.08
DDGS, dry (lb.)	23.7	1.66
DDGS, wet (lb.)	121.8	9.46
Other feed stuffs (lb)	441.3	21.43
Veterinary		5.35
Fuel & oil		5.17
Repairs		7.49
Miscellaneous		7.60
Total direct expenses		152.82
Return over direct expense		56.64
Overhead Expenses		
Hired labor		7.68
Mach & bldg depreciation		7.54
Miscellaneous		10.24
Total overhead expenses		25.45
Total dir & ovhd expenses		178.27
Net return		31.19
Labor & management charge		14.20
Net return over lbr & mgt		16.99
Cost of Production Per Cwt. Produced		
Total direct expense per unit		146.04
Total dir & ovhd expense per unit		151.38
With other revenue adjustments		151.38
With labor and management		154.36
Est. labor hours per unit		0.54
Other Information		
No. purchased or trans in		281
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Percentage death loss		0.7
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Average purchase weight		581
Avg wgt / Backgnd Beef sold		770
Avg purch price / cwt.		183.89
Avg sales price / cwt.		154.18

Figure 1. Net Farm Income (Accrual) Per Farm

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

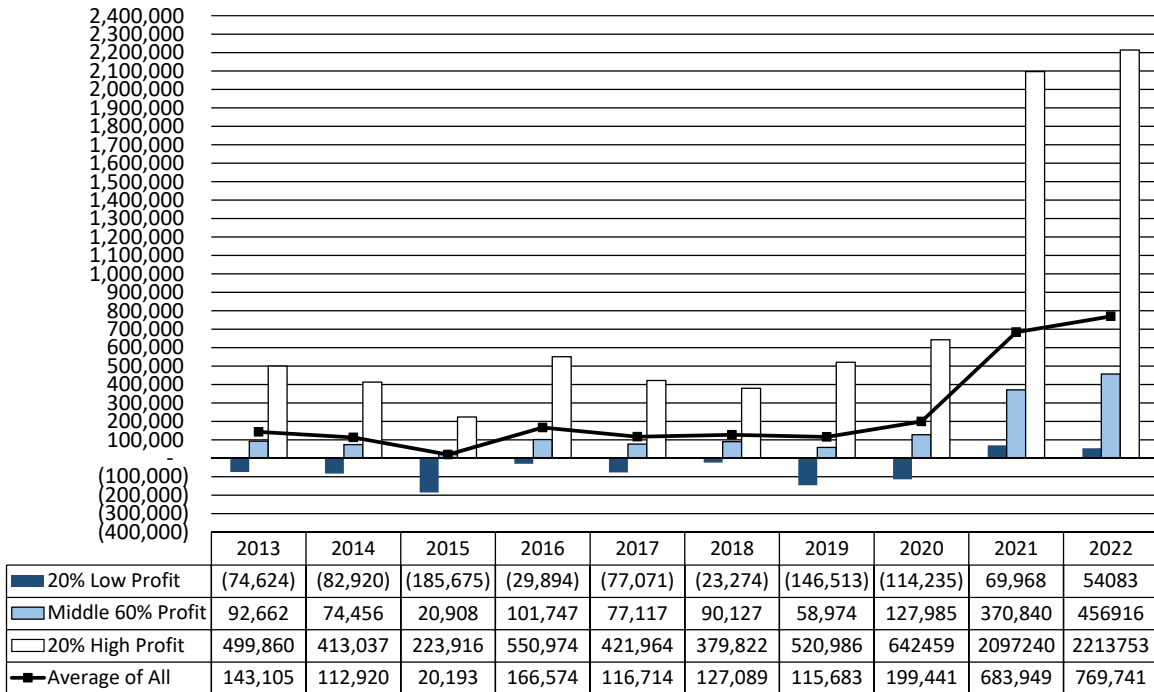


Figure 2. Financial Efficiency Measures (As Percent of Gross Revenue)

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

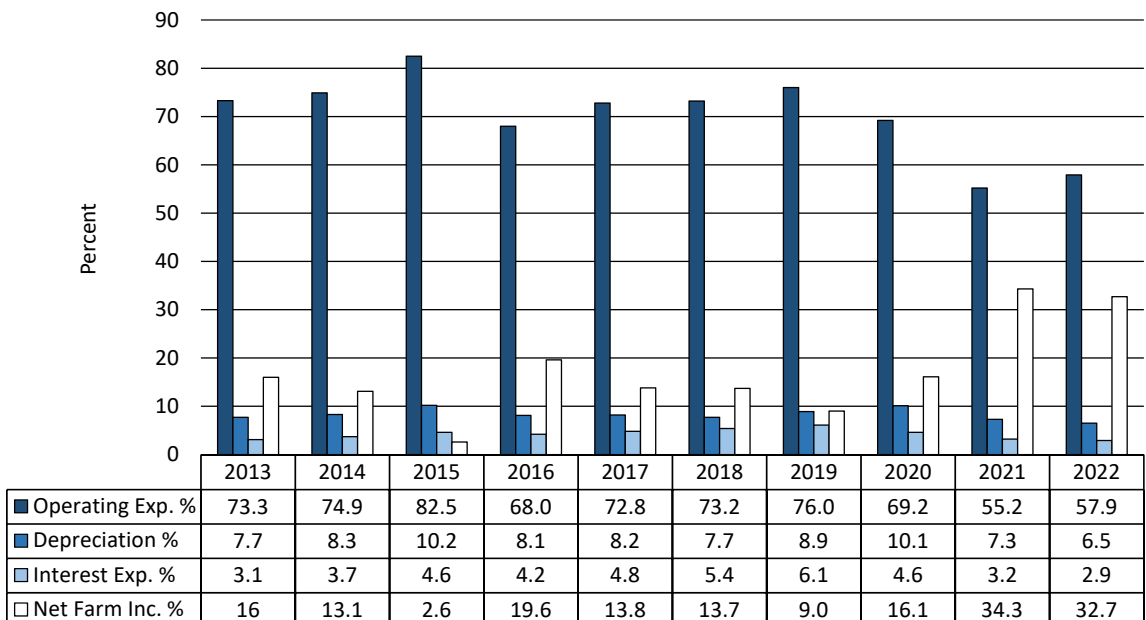
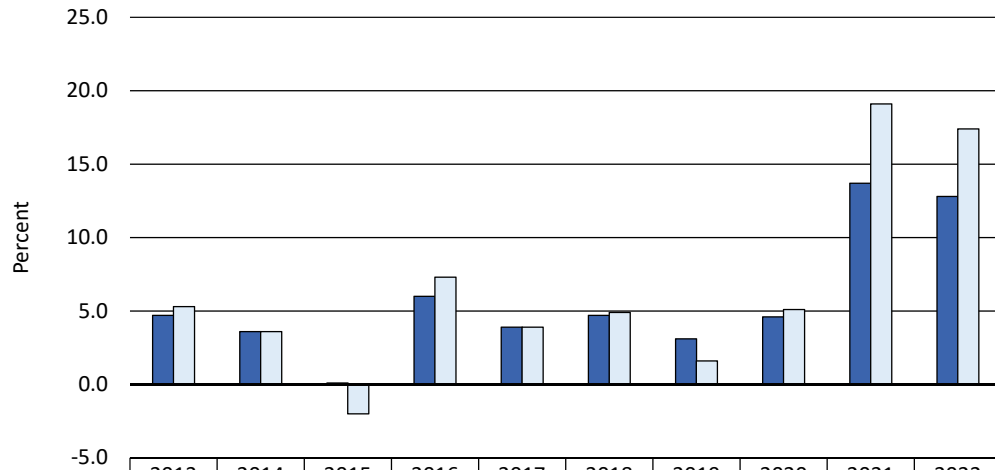


Figure 3. Profitability Measures Per Farm

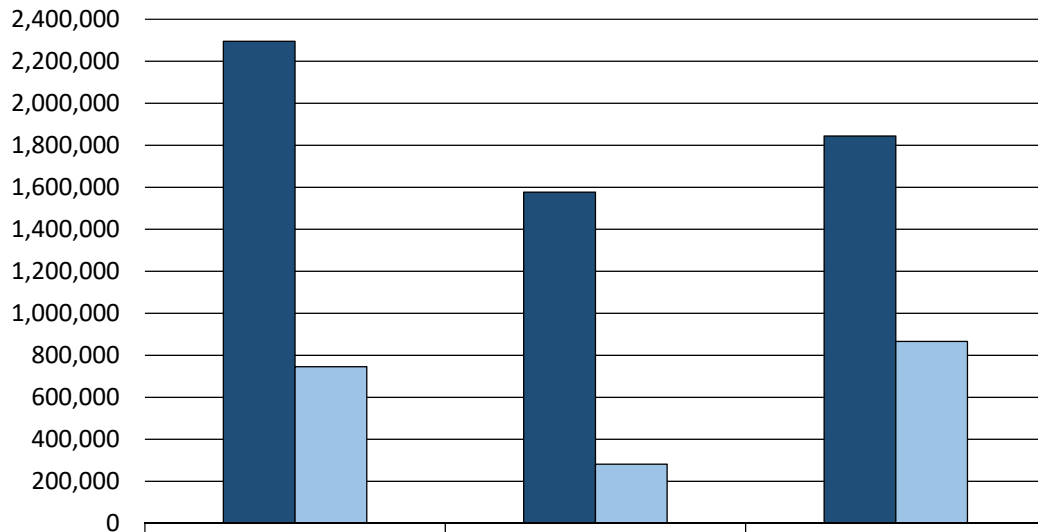
N.D. Farm Business Management Education Program – South Central Region



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Rate of Return on Assets	4.7	3.6	0.1	6.0	3.9	4.7	3.1	4.6	13.7	12.8
Rate of Return on Equity	5.3	3.6	-2.0	7.3	3.9	4.9	1.6	5.1	19.1	17.4

Figure 4. Assets and Liabilities Per Farm, 2022

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



	Current	Intermediate	Longterm
Farm Assets	2,295,187	1,576,920	1,844,083
Farm Liabilities	745,651	281,712	866,264

Figure 5. Spring Wheat Costs Per Acre

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

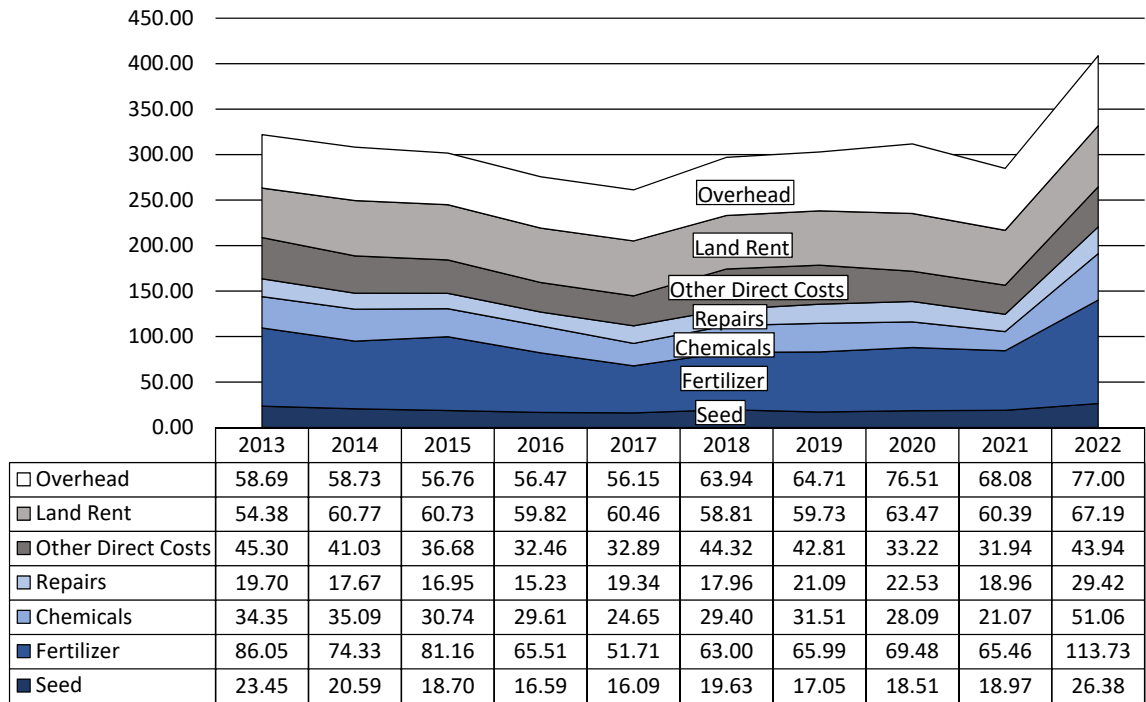
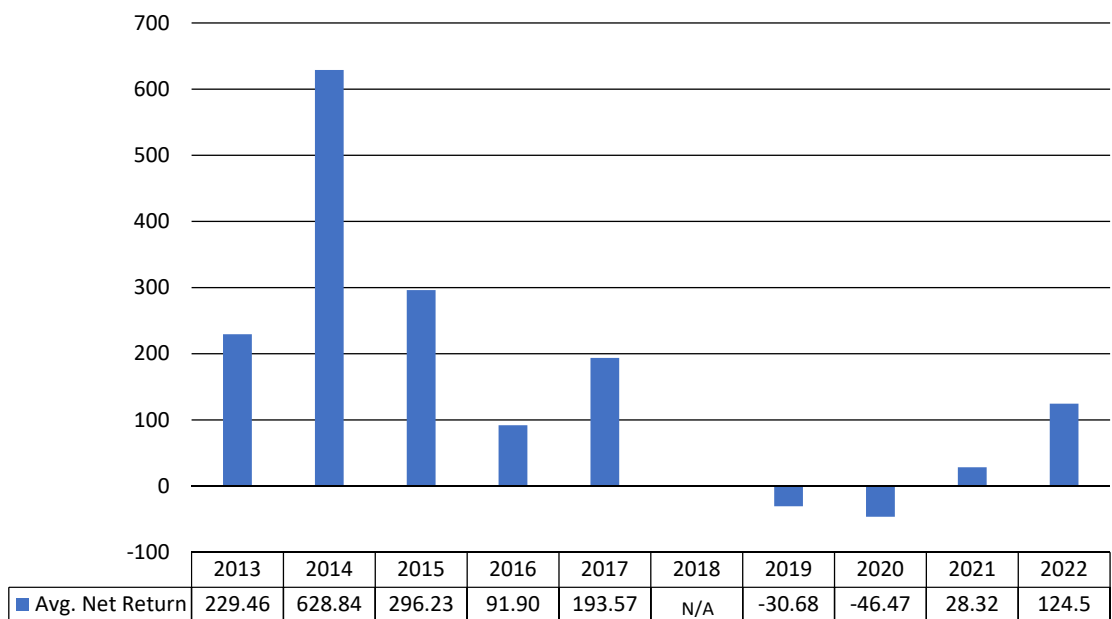


Figure 6. Average Net Return Per Beef Cow

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