

2023 ANNUAL REPORT

State Averages

North Dakota Farm Management Education



www.ndfarmmanagement.com



North Dakota Department of Career
and Technical Education

Mr. Wayde Sick, State Director

Board Members

Ms. Sonia Meehl, Chair	Oakes
Mr. Mike McHugh, Vice-Chair	Mandan
Ms. Kirsten Baesler	Bismarck
Mr. Pat Bertagnolli	Bismarck
Ms. Lyndsi Engstrom	Westhope
Dr. Mark Hagerott	Bismarck
Mr. Burdell Johnson	Tuttle
Mr. Josh Johnson	Valley City
Mr. Eric Nelson	Williston

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 2023.

THANK YOU TO ALL OF OUR STARS for sponsoring the averages:

DISTINGUISHED STAR PARTNER (\$25,000) – Twin Cities Region Northland Ford Dealers

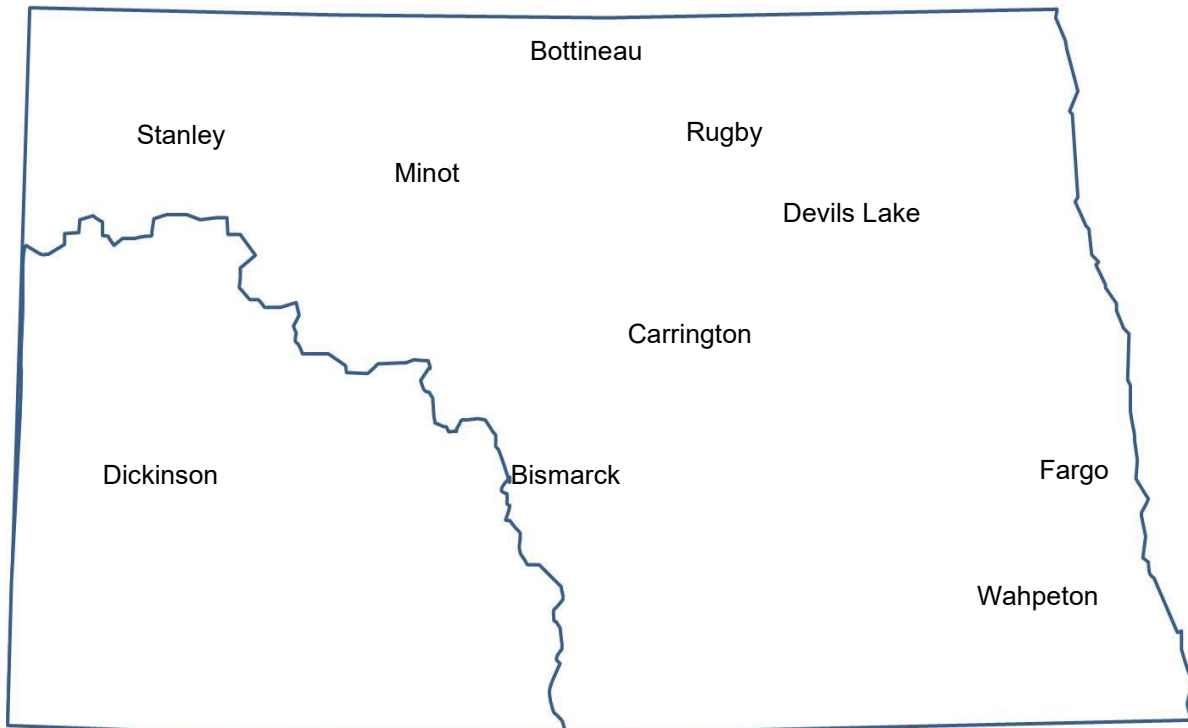
This project is also funded partly by the USDA NIFA Farm Business Management and Benchmarking Grant.

NORTH DAKOTA FARM BUSINESS MANAGEMENT EDUCATION

2023 ANNUAL REPORT

<u>School</u>	<u>Instructor</u>
Bismarck State College – Bismarck.....	Kyle Olson
Dakota College at Bottineau – Bottineau	Linda Burbidge
Dakota College at Bottineau – Minot	Lynsey Aberle
Dakota College at Bottineau – Rugby.....	Morgan Stutrud
Dakota College at Bottineau – Stanley	Duane Kabanuk
Lake Region State College – Carrington.....	Jason Fewell
Lake Region State College – Devils Lake.....	Darren Wilcox
NDSCS – Fargo	Kelcey Hoffmann
NDSCS – Oakes	Kelcey Hoffmann
NDSCS – Wahpeton.....	Leah Maertens

This report was made possible by the farm families who cooperated with their farm management instructors in getting the records for 2023 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.



2023 State Report
North Dakota Farm Business Management Education

TABLE OF CONTENTS

Introduction	1
Explanatory Notes for the Farm Operators' Reports	2
Farm Income Statement	7
Inventory Changes	9
Depreciation	10
Profitability Measures	11
Liquidity and Repayment Capacity Measures	12
Balance Sheet at Cost Values.....	13
Statement of Cash Flows	14
Financial Standards Measures	15
Crop Production and Marketing Summary	16
Household and Personal Expenses	17
Operator and Labor Information	18
Nonfarm Summary.....	19
Financial Summary (sorted by gross farm income)	20
Financial Summary (sorted by age of operator).....	21
Financial Summary (sorted by farm type).....	22
Explanatory Notes for Crop Tables	23
Barley on Owned Land.....	24
Barley on Cash Rent.....	25
Beans, Pinto on Owned Land.....	26
Beans, Pinto on Cash Rent.....	27
Canola on Owned Land	28
Canola on Cash Rent	29
Canola on Share Rent.....	30
Corn on Owned Land.....	31
Corn on Cash Rent	32
Corn Silage on Owned Land	33
Corn Silage on Cash Rent	34
CRP on Owned Land	35
Hay, Alfalfa on Owned Land.....	36
Hay, Alfalfa on Cash Rent.....	37
Hay, Grass on Owned Land	38
Hay, Grass on Cash Rent	39
Hay, Mixed Alfalfa/Grass on Owned Land.....	40
Hay, Mixed Alfalfa/Grass on Cash Rent	41
Hay, Small Grain on Owned Land.....	42
Hay, Small Grain on Cash Rent	43
Oats on Cash Rent	44
Pasture on Owned Land	45
Pasture on Cash Rent	46
Peas, Dry Edible on Cash Rent.....	47
Prevented Planting on Owned Land.....	48
Prevented Planting on Cash Rent.....	49
Soybeans on Owned Land	50

Soybeans on Cash Rent	51
Soybeans on Share Rent	52
Sugar Beets on Cash Rent.....	53
Sunflowers on Owned Land	54
Sunflowers on Cash Rent	55
Wheat, Durum on Owned Land.....	56
Wheat, Durum on Cash Rent	57
Wheat, Spring on Owned Land	58
Wheat, Spring on Cash Rent	59
Wheat, Spring on Share Rent	60
Explanatory Notes for Livestock Tables	61
Beef Cow-Calf – Average Per Cwt. Produced	62
Beef Cow-Calf – Average Per Cow	63
Beef Cow-Calf Whole Herd w/backgrounding – Average Per Cwt. Produced.....	64
Beef Cow-Calf Whole Herd w/backgrounding – Average Per Cow.....	65
Beef Replacement Heifers – Average Per Head	66
Beef Replacement Heifers – Average Per Head Sold/Trans	67
Beef, Background Beef – Average Per Cwt Produced.....	68
Beef, Background Beef – Average Per Head	69
Figure 1. Gross Cash Income per Farm	70
Figure 2. Net Farm Income (Accrual) per Farm	70
Figure 3. Financial Efficiency Measures.....	71
Figure 4. Profitability Measures per Farm	71
Figure 5. Assets and Liabilities per Farm, 2022	72
Figure 6. Total Farm Assets and Liabilities	72
Figure 7. Household and Personal Expenses	73
Figure 8. Crop Acreage per Farm	73
Figure 9. Spring Wheat Costs per Acre	74
Figure 10. Average Net Return per Beef Cow	74

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 2023 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 35th 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, and CSP.

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 operators 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
State Report, 2023
(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	230	46	46	46
Cash Farm Income				
Barley	27,890	10,630	6,375	53,554
Beans, Garbonzo	513	-	-	-
Beans, Pinto	27,961	14,502	9,082	66,093
Buckwheat	613	3,067	-	-
Canola	90,436	111,668	71,931	124,015
Corn	227,950	193,184	131,244	494,637
Corn Silage	2,116	1,615	7,822	1,142
Flax	1,842	-	8,270	21
Hay, Alfalfa	1,624	-	3,269	171
Lentils	368	-	-	1,840
Oats	8,897	13,156	3,110	3,902
Peas, Dry Edible	7,494	4,188	3,336	28,103
Rye	729	1,843	-	737
Soybeans	296,828	328,444	192,122	555,192
Sugar Beets	24,296	-	3,877	55,836
Sunflowers	42,014	44,747	3,505	118,932
Wheat, Durum	31,528	26,664	2,899	88,132
Wheat, Spring	237,441	222,252	153,497	455,856
Wheat, Winter	1,630	27	3,971	3,470
Hay	3,366	4,547	3,128	1,866
Miscellaneous crop income	8,287	2,429	6,759	26,982
Beef Bulls	476	-	65	104
Beef Cow-Calf, Beef Calves	36,581	15,926	33,482	46,477
Beef Replacement Heifers	1,696	1,118	2,827	3,975
Beef Backgrounding	24,205	24,870	26,578	38,364
Beef Finishing	2,018	9,283	-	-
Beef Finish Yearlings	1,807	43	-	-
Cull breeding livestock	13,743	17,203	8,189	19,908
Misc. livestock income	16,214	81,071	236	681
CRP payments	501	177	92	1,050
Livestock govt payments	1,517	3,956	1,116	1,048
Conservation govt payment	5,409	5,915	4,349	9,207
Other government payments	13,514	15,333	9,906	18,771
Custom work income	9,924	10,538	7,723	19,371
Patronage dividends, cash	10,561	16,286	5,765	17,362
Crop insurance income	62,926	97,800	36,656	104,874
Property insurance income	415	587	432	461
Sale of resale items	1,188	-	367	5,566
Livestock insurance inc	253	-	635	-
Farm rental income	7,251	2,113	2,442	16,263
Other farm income	23,069	17,449	9,638	48,929
Gross Cash Farm Income	1,279,151	1,302,629	764,697	2,432,893

Farm Income Statement (continued)
North Dakota Farm Business Management Education Program
State Report, 2023
(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	230	46	46	46
Cash Farm Expense				
Seed and plants	121,382	117,183	65,667	242,840
Fertilizer	162,854	186,572	98,912	276,989
Crop chemicals	111,954	123,626	58,152	205,902
Crop insurance	53,176	59,803	29,371	97,892
Drying expense	1,854	3,178	846	2,879
Storage	411	523	185	1,216
Irrigation energy	538	736	-	1,472
Crop miscellaneous	2,120	2,415	2,334	2,017
Consultants	3,625	4,442	2,119	7,446
Feeder livestock purchase	11,324	23,313	3,535	5,442
Purchased feed	19,095	47,292	9,347	12,201
Breeding fees	437	1,448	185	445
Veterinary	3,089	4,529	3,084	3,123
Supplies	3,071	7,752	1,589	1,640
Livestock insurance	107	8	100	-
Livestock leases	206	203	-	-
Interest	53,464	85,801	27,681	71,235
Fuel & oil	52,067	53,082	38,461	89,901
Repairs	97,419	120,490	71,214	151,651
Custom hire	23,671	22,397	14,729	33,131
Hired labor	42,347	68,230	21,398	77,380
Land rent	145,402	131,620	90,499	271,718
Stock/quota lease	419	-	-	-
Machinery leases	14,329	20,603	6,590	23,250
Building leases	883	477	934	1,276
Real estate taxes	6,527	8,173	4,552	11,194
Farm insurance	16,583	19,183	12,153	27,015
Utilities	10,203	12,558	6,535	17,553
Hauling and trucking	2,326	8,379	201	2,334
Marketing	1,696	3,058	567	1,897
Dues & professional fees	5,916	5,574	4,390	11,481
Purchase of resale items	4,418	-	-	22,092
Miscellaneous	15,396	12,620	11,363	32,019
Advertising & promotion	73	-	80	278
Total cash expense	988,382	1,155,270	586,770	1,706,904
Net cash farm income	290,769	147,359	177,926	725,989
Inventory Changes				
Prepays and supplies	-25,344	-9,740	-33,421	-49,671
Accounts receivable	9,001	18,437	11,247	19,539
Hedging accounts	2,471	137	-1,252	9,935
Other current assets	5,723	609	-282	9,254
Crops and feed	-60,450	-222,607	-61,350	64,689
Market livestock	13,249	17,580	15,088	8,651
Breeding livestock	-5,401	-10,596	-1,499	-4,426
Other assets	4,506	-907	258	6,187
Accounts payable	-3,200	-10,299	20,705	-9,571
Accrued interest	-8,993	-13,605	-6,640	-13,226
Total inventory change	-68,437	-230,991	-57,145	41,362
Net operating profit	222,332	-83,631	120,782	767,351
Depreciation				
Machinery and equipment	-75,408	-72,437	-43,403	-157,265
Titled vehicles	-10,506	-11,578	-4,402	-17,760
Buildings and improvements	-9,003	-7,676	-2,862	-20,817
Total depreciation	-94,916	-91,692	-50,667	-195,842
Net farm income from operations	127,416	-175,323	70,115	571,509
Gain or loss on capital sales	12,158	-934	3,347	42,415
Net farm income	139,574	-176,257	73,462	613,924

Inventory Changes
North Dakota Farm Business Management Education Program
State Report, 2023
(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	230	46	46	46
Net cash farm income	290,769	147,359	177,926	725,989
Crops and Feed				
Ending inventory	772,906	621,466	364,001	1,915,168
Beginning inventory	833,357	844,073	425,351	1,850,480
Inventory change	-60,450	-222,607	-61,350	64,689
Market Livestock				
Ending inventory	56,259	53,776	56,711	72,406
Beginning inventory	43,010	36,195	41,623	63,755
Inventory change	13,249	17,580	15,088	8,651
Accts Receivable				
Ending inventory	71,436	69,272	38,729	156,863
Beginning inventory	62,435	50,835	27,482	137,323
Inventory change	9,001	18,437	11,247	19,539
Prepaid Expenses and Supplies				
Ending inventory	123,465	82,129	54,332	335,501
Beginning inventory	148,808	91,869	87,752	385,172
Inventory change	-25,344	-9,740	-33,421	-49,671
Hedging Activities				
Ending inventory	8,285	4,994	718	26,403
Withdrawals	9,455	7,927	1,271	26,566
Beginning inventory	9,008	6,571	3,042	27,447
Deposits	6,261	6,213	198	15,587
Gain or loss	2,471	137	-1,252	9,935
Other Current Assets				
Ending inventory	11,629	13,176	2,200	22,853
Beginning inventory	5,906	12,567	2,482	13,599
Inventory change	5,723	609	-282	9,254
Breeding Livestock				
Ending inventory	89,950	89,911	89,349	122,278
Capital sales	5,067	3,382	8,390	5,569
Beginning inventory	89,069	100,584	83,702	119,409
Capital purchases	11,349	3,305	15,536	12,864
Depreciation, capital adjust	-5,401	-10,596	-1,499	-4,426
Other Capital Assets				
Ending inventory	165,922	166,549	32,510	461,788
Capital sales	27,142	2,151	67	121,249
Beginning inventory	146,006	162,170	30,393	376,020
Capital purchases	42,552	7,438	1,926	200,829
Depreciation, capital adjust	4,506	-907	258	6,187
Accounts Payable				
Beginning inventory	24,257	23,969	25,922	22,110
Ending inventory	27,457	34,268	5,217	31,681
Inventory change	-3,200	-10,299	20,705	-9,571
Accrued Interest				
Beginning inventory	21,460	35,999	11,740	28,137
Ending inventory	30,452	49,604	18,380	41,363
Inventory change	-8,993	-13,605	-6,640	-13,226
Total inventory change	-68,437	-230,991	-57,145	41,362
Net operating profit	222,332	-83,631	120,782	767,351

Depreciation
North Dakota Farm Business Management Education Program
State Report, 2023
(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	230	46	46	46
Net operating profit	222,332	-83,631	120,782	767,351
Machinery and Equipment				
Ending inventory	902,994	847,646	556,745	1,862,591
Capital sales	70,414	49,955	20,474	204,343
Beginning inventory	795,680	800,236	505,789	1,590,259
Capital purchases	253,136	169,802	114,833	633,940
Depreciation, capital adjust.	-75,408	-72,437	-43,403	-157,265
Titled Vehicles				
Ending inventory	103,573	116,214	61,197	169,044
Capital sales	3,512	5,682	2,683	5,601
Beginning inventory	90,768	109,994	54,908	137,902
Capital purchases	26,823	23,480	13,373	54,503
Depreciation, capital adjust.	-10,506	-11,578	-4,402	-17,760
Buildings and Improvements				
Ending inventory	295,090	232,192	132,677	714,460
Capital sales	130	-	-	-
Beginning inventory	253,686	212,982	105,542	603,832
Capital purchases	50,537	26,885	29,996	131,446
Depreciation, capital adjust.	-9,003	-7,676	-2,862	-20,817
Total depreciation, capital adj.	-94,916	-91,692	-50,667	-195,842
Net farm income from operations	127,416	-175,323	70,115	571,509
Gain or loss on capital sales	12,158	-934	3,347	42,415
Net farm income	139,574	-176,257	73,462	613,924

Profitability Measures
North Dakota Farm Business Management Education Program
State Report, 2023
(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	230	46	46	46
Profitability (assets valued at cost)				
Net farm income from operations	127,416	-175,323	70,115	571,509
Rate of return on assets	3.1 %	-4.6 %	2.4 %	7.0 %
Rate of return on equity	2.1 %	-15.7 %	1.2 %	8.1 %
Operating profit margin	8.9 %	-14.9 %	7.0 %	20.4 %
Asset turnover rate	34.6 %	30.6 %	34.7 %	34.2 %
Farm interest expense	62,456	99,406	34,321	84,461
Value of operator lbr and mgmt.	82,061	78,379	54,108	144,723
Return on farm assets	107,811	-154,296	50,328	511,246
Average farm assets	3,501,425	3,378,406	2,058,799	7,339,778
Return on farm equity	45,355	-253,702	16,007	426,785
Average farm equity	2,196,847	1,615,235	1,313,511	5,270,242
Value of farm production	1,212,475	1,034,339	713,887	2,510,580

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	230	46	46	46
Profitability (assets valued at market)				
Net farm income from operations	218,171	-61,360	118,807	640,094
Rate of return on assets	4.6 %	-1.0 %	3.9 %	6.6 %
Rate of return on equity	4.6 %	-5.7 %	3.6 %	7.4 %
Operating profit margin	16.4 %	-3.9 %	13.9 %	23.1 %
Asset turnover rate	28.3 %	24.5 %	27.9 %	28.6 %
Farm interest expense	62,456	99,406	34,321	84,461
Value of operator lbr and mgmt.	82,061	78,379	54,108	144,723
Return on farm assets	198,567	-40,333	99,020	579,832
Average farm assets	4,291,512	4,224,684	2,558,968	8,790,497
Return on farm equity	136,110	-139,739	64,700	495,371
Average farm equity	2,983,685	2,461,513	1,813,680	6,720,961
Value of farm production	1,212,475	1,034,339	713,887	2,510,580

Liquidity & Repayment Capacity Measures
North Dakota Farm Business Management Education Program
State Report, 2023
(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	230	46	46	46
Liquidity				
Current ratio	2.01	1.19	2.31	2.66
Working capital	560,334	146,281	333,071	1,666,989
Change in working capital	-190,393	-412,452	-108,163	-162,156
Working capital to gross revenue	44.9 %	13.2 %	45.8 %	65.4 %
Working capital to oper expense	58.2 %	13.4 %	58.3 %	98.1 %
Current assets	1,113,792	900,592	588,172	2,674,147
Current liabilities	553,458	754,311	255,101	1,007,158
Gross revenues (accrual)	1,247,313	1,104,943	726,769	2,550,315
Total operating expenses	962,525	1,089,168	571,667	1,698,504
Repayment capacity				
Net farm income from operations	127,416	-175,323	70,115	571,509
Depreciation	94,916	91,692	50,667	195,842
Personal income	48,316	53,316	31,735	75,526
Family living/owner withdrawals	-92,756	-100,542	-66,528	-128,281
Cash discrepancy	-233	-184	97	-312
Income taxes	-24,611	-19,515	-11,285	-69,159
Interest expense	65,392	103,643	35,996	86,948
Debt repayment capacity	218,440	-46,913	110,796	732,072
Debt payments	153,644	206,115	98,880	225,053
Repayment margin	64,796	-253,028	11,916	507,019
Cash replacement allowance	-65,133	-55,142	-31,923	-152,449
Replacement margin	-337	-308,170	-20,007	354,570
Debt coverage ratio	1.42	-0.23	1.12	3.25
Term debt coverage ratio	1.51	-0.59	1.14	3.68
Replacement coverage ratio	1.00	-0.18	0.85	1.94

Balance Sheet at Cost Values
North Dakota Farm Business Management Education Program
State Report, 2023
(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	230	46	46	46
Assets				
Current Farm Assets				
Cash and checking balance	69,812	55,781	71,481	144,952
Prepaid expenses & supplies	123,465	82,129	54,332	335,501
Growing crops	3,713	340	232	9,804
Accounts receivable	71,436	69,272	38,729	156,863
Hedging accounts	8,285	4,994	718	26,403
Crops held for sale or feed	772,906	621,466	364,001	1,915,168
Crops under government loan	-	-	-	-
Market livestock held for sale	56,259	53,776	56,711	72,406
Other current assets	7,916	12,836	1,969	13,049
Total current farm assets	1,113,792	900,592	588,172	2,674,147
Intermediate Farm Assets				
Breeding livestock	89,950	89,911	89,349	122,278
Machinery and equipment	902,994	847,646	556,745	1,862,591
Titled vehicles	103,573	116,214	61,197	169,044
Other intermediate assets	61,458	90,723	15,208	94,633
Total intermediate farm assets	1,157,976	1,144,495	722,499	2,248,545
Long Term Farm Assets				
Farm land	944,859	1,020,420	640,821	1,730,770
Buildings and improvements	295,090	232,192	132,677	714,460
Other long-term assets	104,464	75,826	17,301	367,155
Total long-term farm assets	1,344,413	1,328,438	790,799	2,812,386
Total Farm Assets	3,616,181	3,373,525	2,101,470	7,735,078
Total Nonfarm Assets	463,571	549,180	280,364	731,200
Total Assets	4,079,752	3,922,705	2,381,834	8,466,278
Liabilities				
Current Farm Liabilities				
Accrued interest	30,452	49,604	18,380	41,363
Accounts payable	27,438	34,268	5,185	31,681
Current notes	399,789	568,641	164,915	774,702
Government crop loans	-	-	-	-
Principal due on term debt	95,779	101,798	66,621	159,411
Total current farm liabilities	553,458	754,311	255,101	1,007,158
Total intermediate farm liabs	244,527	263,804	150,405	374,199
Total long term farm liabilities	608,886	885,821	379,003	868,050
Total farm liabilities	1,406,870	1,903,936	784,509	2,249,407
Total nonfarm liabilities	87,075	152,303	57,043	79,557
Total liabilities	1,493,945	2,056,239	841,552	2,328,964
Net worth (farm and nonfarm)	2,585,807	1,866,466	1,540,282	6,137,315
Net worth change	82,166	-239,981	33,735	520,964
Percent net worth change	3 %	-11 %	2 %	9 %
Ratio Analysis				
Current farm liabilities / assets	50 %	84 %	43 %	38 %
Intermediate farm liab. / assets	21 %	23 %	21 %	17 %
Long term farm liab. / assets	45 %	67 %	48 %	31 %
Total debt to asset ratio	37 %	52 %	35 %	28 %

Statement Of Cash Flows
North Dakota Farm Business Management Education Program
State Report, 2023
(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	230	46	46	46
Beginning cash (farm & nonfarm)	110,596	137,133	102,062	160,349
Cash Provided By Operating Activities				
Gross cash farm income	1,279,151	1,302,629	764,697	2,432,893
Total cash farm expense	-988,382	-1,155,270	-586,770	-1,706,904
Net cash from hedging transactions	3,194	1,714	1,073	10,979
Cash provided by operating	293,963	149,073	178,999	736,968
Cash Provided By Investing Activities				
Sale of breeding livestock	5,099	3,557	8,375	5,569
Sale of machinery & equipment	81,048	47,372	24,198	241,699
Sale of titled vehicles	4,288	5,799	2,321	8,971
Sale of farm land	7,499	15,527	326	19,778
Sale of farm buildings	468	-	-	1,689
Sale of other farm assets	27,249	2,151	67	121,249
Sale of nonfarm assets	6,291	16,538	4,136	2,642
Purchase of breeding livestock	-11,349	-3,305	-15,536	-12,864
Purchase of machinery & equip.	-253,136	-169,802	-114,833	-633,940
Purchase of titled vehicles	-26,823	-23,480	-13,373	-54,503
Purchase of farm land	-118,450	-154,615	-79,215	-217,717
Purchase of farm buildings	-50,537	-26,885	-29,996	-131,446
Purchase of other farm assets	-42,552	-7,438	-1,926	-200,829
Purchase of nonfarm assets	-53,468	-69,646	-44,664	-71,306
Cash provided by investing	-424,372	-364,229	-260,121	-921,008
Cash Provided By Financing Activities				
Money borrowed	945,656	1,150,364	518,400	1,682,033
Principal payments	-747,516	-868,501	-415,271	-1,343,336
Personal income	48,316	53,316	31,735	75,526
Family living/owner withdrawals	-92,756	-100,542	-66,528	-128,281
Income and social security tax	-25,494	-20,220	-12,365	-68,710
Capital contributions	3,408	13,788	2,386	-
Capital distributions	-13,671	-24,063	-	-40,337
Dividends paid	-	-	-	-
Cash gifts and inheritances	9,950	655	3,581	41,238
Gifts given	-311	-	-326	-
Other cash flows	3	-	-	-
Cash provided by financing	127,584	204,798	61,612	218,132
Net change in cash balance	-2,825	-10,358	-19,510	34,091
Ending cash (farm & nonfarm)	107,538	126,591	82,649	194,129
Discrepancy	233	184	-97	312

Financial Standards Measures
North Dakota Farm Business Management Education Program
State Report, 2023
(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	230	46	46	46
Liquidity				
Current ratio	2.01	1.19	2.31	2.66
Working capital to gross revenue	44.9 %	13.2 %	45.8 %	65.4 %
Working capital to oper expense	58.2 %	13.4 %	58.3 %	98.1 %
Solvency (market)				
Farm debt to asset ratio	32 %	45 %	30 %	24 %
Farm equity to asset ratio	68 %	55 %	70 %	76 %
Farm debt to equity ratio	0.46	0.80	0.43	0.32
Profitability (cost)				
Rate of return on farm assets	3.1 %	-4.6 %	2.4 %	7.0 %
Rate of return on farm equity	2.1 %	-15.7 %	1.2 %	8.1 %
Operating profit margin	8.9 %	-14.9 %	7.0 %	20.4 %
Asset turnover rate	34.6 %	30.6 %	34.7 %	34.2 %
Repayment Capacity				
Debt coverage ratio	1.42	-0.23	1.12	3.25
Term debt coverage ratio	1.51	-0.59	1.14	3.68
Replacement coverage ratio	1.00	-0.18	0.85	1.94
Efficiency				
Operating expense ratio	77.2 %	98.6 %	78.7 %	66.6 %
Depreciation expense ratio	7.6 %	8.3 %	7.0 %	7.7 %
Interest expense ratio	5.0 %	9.0 %	4.7 %	3.3 %
Net farm income ratio	10.2 %	-15.9 %	9.6 %	22.4 %

Crop Production and Marketing Summary
North Dakota Farm Business Management Education Program
State Report, 2023
(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	230	46	46	46
Acreage Summary				
Total acres owned	829	781	731	1,420
Total crop acres	2,254	2,311	1,470	4,011
Crop acres owned	480	545	313	858
Crop acres cash rented	1,702	1,727	1,111	3,021
Crop acres share rented	72	40	46	131
Total pasture acres	441	301	448	502
Percent crop acres owned	21 %	24 %	21 %	21 %
Mach invest/crop acre cost	414	405	383	465
Mach invest/crop acre market	532	513	474	607
Average Price Received (Cash Sales Only)				
Wheat, Spring per bushel	8.39	7.99	8.46	8.86
Soybeans per bushel	12.99	13.04	12.89	13.10
Corn per bushel	5.71	5.02	5.40	6.15
Canola per cwt	25.83	25.11	26.02	27.45
Barley per bushel	7.27	-	-	6.77
Sunflowers per cwt	24.83	20.35	-	27.01
Wheat, Durum per bushel	10.14	-	-	10.51
Oats per bushel	4.33	4.34	-	-
Beans, Pinto per cwt	36.78	-	-	36.60
Hay per ton	77.88	-	-	-
Flax per bushel	16.37	-	-	-
Wheat, Winter per bushel	8.67	-	-	-
Straw per ton	74.46	-	-	-
Average Yield Per Acre				
Soybeans (bushel)	38.38	31.79	31.49	40.77
Wheat, Spring (bushel)	56.98	49.17	53.15	66.10
Corn (bushel)	150.49	150.06	129.46	158.46
Canola (cwt)	20.57	18.35	20.22	22.07
Barley (bushel)	71.43	49.59	55.47	78.10
Hay, Mixed Alfalfa/Grass (ton)	1.43	1.28	1.77	2.12
Sunflowers (cwt)	21.66	15.84	-	24.62
Wheat, Durum (bushel)	50.66	47.92	-	50.92
Beans, Pinto (cwt)	19.94	-	-	22.27
Hay, Grass (ton)	1.38	1.23	1.39	1.69
Hay, Small Grain (ton)	2.20	-	2.11	2.10
Hay, Alfalfa (ton)	2.13	1.82	2.26	2.91
Corn Silage (ton)	14.98	9.17	16.21	-
Oats (bushel)	111.85	101.91	-	-
Peas, Dry Edible (bushel)	35.30	34.09	31.51	38.79
Sugar Beets (ton)	23.99	-	-	23.64
Soybeans, Food (bushel)	36.36	27.76	-	-
Hay, Mixed (ton)	1.55	-	-	-
Hay (ton)	1.85	-	-	-
Barley, Malting (bushel)	70.07	-	-	-
Soybeans, Natto (bushel)	25.13	-	-	-
Straw (ton)	0.889	-	-	-
Flax (bushel)	18.64	-	-	-
Aftermath Grazing (aum)	4.89	-	-	-
Wheat, Winter (bushel)	54.80	-	-	-
Hay, Sudan Grass (ton)	2.60	-	-	-
Cover crop grazing (aum)	2.98	-	-	-
Sunflowers, Confectionary (cwt)	22.24	-	-	-

Household and Personal Expenses
North Dakota Farm Business Management Education Program
State Report, 2023
(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	45	9	9	6
Average family size	2.9	3.4	2.7	2.8
Family Living Expenses				
Food and meals expense	11,310	14,062	11,898	12,169
Medical care	6,234	8,656	3,754	12,398
Health insurance	6,765	4,428	5,777	14,697
Cash donations	2,068	3,124	1,889	2,425
Household supplies	13,048	30,918	5,765	20,532
Clothing	2,855	6,387	1,577	3,102
Personal care	4,580	5,131	5,646	1,949
Child / Dependent care	1,985	5,273	862	1,724
Alimony and child support	-	-	-	-
Gifts	2,448	3,181	2,104	3,902
Education	822	992	260	1,808
Recreation	7,060	4,297	5,021	16,909
Utilities (household share)	4,240	4,621	5,567	3,577
Personal vehicle operating exp	4,659	9,080	1,480	2,079
Household real estate taxes	195	637	29	466
Dwelling rent	303	278	-	800
Household repairs	3,073	8,768	1,744	1,403
Personal interest	2,890	8,501	1,472	176
Disability / Long term care ins	312	864	-	48
Life insurance payments	4,544	6,318	2,878	7,643
Personal property insurance	638	445	434	577
Miscellaneous	10,414	23,696	7,617	4,401
Total cash family living expense	90,443	149,656	65,772	112,784
Family living from the farm	620	-	-	2,667
Total family living	91,063	149,656	65,772	115,451
Other Nonfarm Expenditures				
Income taxes	21,527	12,942	18,975	70,014
Furnishing & appliance purchases	240	-	1,040	238
Nonfarm vehicle purchases	11,812	14,824	7,521	14,503
Nonfarm real estate purchases	20,179	-19,934	40,740	110,193
Other nonfarm capital purchases	919	1,557	-	1,946
Nonfarm savings & investments	9,979	51,647	9,622	6,207
Total other nonfarm expenditures	64,657	61,036	77,899	203,101
Total cash family living investment & nonfarm capital purch	155,100	210,691	143,671	315,885

Operator and Labor Information
North Dakota Farm Business Management Education Program
State Report, 2023
(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	230	46	46	46
Operator Information				
Average number of operators	1.1	1.1	1.0	1.3
Average age of operators	46.6	50.4	42.6	47.7
Average number of years farming	21.4	25.6	18.4	24.1
Results Per Operator				
Working capital	505,399	131,940	333,071	1,278,025
Total assets (market)	4,501,099	4,486,866	2,976,968	7,660,714
Total liabilities	1,350,387	1,854,647	841,552	1,785,539
Net worth (market)	3,150,712	2,632,219	2,135,416	5,875,175
Net worth excl deferred liabs	3,153,619	2,632,219	2,135,416	5,875,175
Gross farm income	1,125,027	996,615	726,769	1,955,242
Total farm expense	1,010,103	1,154,749	656,655	1,517,085
Net farm income from operations	114,924	-158,134	70,115	438,157
Net nonfarm income	43,579	48,089	31,735	57,903
Family living & tax withdrawals	106,071	108,453	77,716	151,610
Total acres owned	748.0	704.3	731.2	1,088.5
Total crop acres	2,033.0	2,084.8	1,470.1	3,075.1
Crop acres owned	432.8	491.4	313.3	658.1
Crop acres cash rented	1,534.8	1,557.6	1,110.9	2,316.5
Crop acres share rented	65.3	35.8	45.9	100.6
Total pasture acres	398.0	271.4	448.1	384.6
Labor Analysis				
Number of farms	230	46	46	46
Total unpaid labor hours	2,161	2,089	1,989	2,802
Total hired labor hours	1,257	2,480	502	2,113
Total labor hours per farm	3,417	4,569	2,491	4,916
Unpaid hours per operator	1,949	1,884	1,989	2,148
Value of farm production / hour	354.80	226.36	286.60	510.73
Net farm income / unpaid hour	58.97	-83.92	35.25	203.95
Average hourly hired labor wage	32.26	27.98	31.37	36.78
Partnerships & LLCs				
Number of farms	16	3	1	8
Number of operators	1.9	-	-	2.1
Owner withdrawals per farm	-	-	-	-
Withdrawals per operator	-	-	-	-

Nonfarm Summary
North Dakota Farm Business Management Education Program
State Report, 2023
(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	230	46	46	46
Nonfarm Income				
Personal wages & salary	24,924	26,637	17,280	22,690
Net nonfarm business income	8,133	3,321	2,283	27,029
Personal rental income	2,612	4,699	2,404	3,784
Personal interest income	865	379	376	3,056
Personal cash dividends	133	-	-	174
Tax refunds	1,593	1,301	1,188	2,754
Nontaxable personal inc.	3	-	-	-
Other nonfarm income	10,056	16,978	8,204	16,038
Total nonfarm income	48,319	53,316	31,735	75,526
Gifts and inheritances	9,950	655	3,581	41,238
Nonfarm Assets (market)				
Checking & savings	37,726	70,810	11,168	49,177
Stocks & bonds	18,988	10,273	30,650	30,277
Other current assets	9,594	7,280	223	23,734
Furniture & appliances	7,534	12,821	3,638	10,578
Nonfarm vehicles	39,874	44,174	24,805	50,118
Cash value of life ins.	17,539	13,920	19,587	31,214
Retirement accounts	153,102	148,428	133,405	233,627
Other intermediate assets	12,546	27,525	9,014	7,066
Nonfarm real estate	196,633	280,133	116,362	240,347
Personal bus. investment	5,906	2,282	1,261	19,529
Other long term assets	39,246	80,138	870	76,478
Total nonfarm assets	538,690	697,784	350,983	772,146
Nonfarm Liabilities				
Accrued interest	518	1,870	246	163
Accounts payable	11,745	18,095	4,358	23,590
Current notes	2,820	2,611	1,304	224
Princ due on term debt	5,398	7,691	3,365	5,305
Total current liabilities	20,481	30,267	9,273	29,282
Intermediate liabilities	8,805	12,618	3,225	6,023
Long term liabilities	57,789	109,418	44,545	44,252
Total nonfarm liabilities	87,075	152,303	57,043	79,557
Nonfarm net worth	451,615	545,481	293,940	692,589
Nonfarm debt to asset ratio	16 %	22 %	16 %	10 %

Financial Summary Excluding Deferred Liabilities
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Gross Farm Income)

	<u>Avg. Of All Farms</u>	<u>Less than 100,000</u>	<u>100,001 - 250,000</u>	<u>250,001 - 500,000</u>	<u>500,001 - 1,000,000</u>	<u>1,000,001- 2,000,000</u>	<u>Over 2,000,000</u>
Number of farms	230	11	19	38	55	66	41
Income Statement							
Gross cash farm income	1,279,151	41,865	156,551	376,844	752,280	1,424,180	3,440,935
Total cash farm expense	988,382	62,170	137,614	311,222	631,389	1,120,565	2,524,858
Net cash farm income	290,769	-20,305	18,937	65,622	120,891	303,615	916,077
Inventory change	-68,437	48,950	28,268	21,098	-17,452	-112,736	-224,814
Depreciation	-94,916	-4,555	-8,297	-25,812	-40,497	-103,282	-282,881
Net farm income from operations	127,416	24,090	38,908	60,908	62,941	87,597	408,382
Gain or loss on capital sales	12,158	267	27	2,178	2,224	12,314	43,298
Average net farm income	139,574	24,357	38,934	63,086	65,165	99,911	451,681
Median net farm income	70,024	8,283	26,596	62,733	53,407	102,914	359,532
Profitability (cost)							
Rate of return on assets	3.1 %	3.8 %	3.4 %	3.4 %	2.3 %	1.9 %	4.0 %
Rate of return on equity	2.1 %	2.2 %	2.4 %	2.4 %	0.3 %	-0.1 %	3.7 %
Operating profit margin	8.9 %	9.9 %	11.0 %	9.0 %	6.5 %	5.6 %	11.7 %
Asset turnover rate	34.6 %	38.5 %	30.5 %	37.8 %	35.9 %	34.7 %	34.0 %
Profitability (market)							
Rate of return on assets	4.6 %	7.7 %	3.5 %	4.3 %	5.1 %	3.8 %	5.1 %
Rate of return on equity	4.7 %	22.4 %	3.5 %	4.4 %	5.4 %	3.2 %	5.4 %
Operating profit margin	16.4 %	21.1 %	14.3 %	15.9 %	18.2 %	13.3 %	17.9 %
Asset turnover rate	28.3 %	36.6 %	24.3 %	27.2 %	27.9 %	28.2 %	28.6 %
Liquidity & Repayment (end of year)							
Current assets	1,113,792	94,492	193,486	337,140	593,646	1,142,042	3,185,850
Current liabilities	553,458	75,104	89,186	150,544	334,128	543,218	1,581,085
Current ratio	2.01	1.26	2.17	2.24	1.78	2.10	2.01
Working capital	560,334	19,389	104,299	186,597	259,518	598,824	1,604,764
Change in working capital	-190,393	-4,920	10,826	-7,823	-98,686	-236,810	-550,917
Working capital to gross revenue	44.9 %	20.6 %	55.2 %	45.3 %	34.2 %	44.3 %	48.5 %
Working capital to oper expense	58.2 %	33.2 %	81.2 %	61.6 %	42.3 %	55.3 %	64.8 %
Debt coverage ratio	1.42	1.69	1.35	1.45	0.80	1.07	1.97
Term debt coverage ratio	1.51	1.86	1.41	1.53	0.76	1.09	2.18
Replacement coverage ratio	1.00	1.58	1.15	1.14	0.66	0.78	1.24
Term debt to EBITDA	2.72	2.24	3.61	3.06	3.64	3.57	1.99
Solvency (end of year at cost)							
Number of farms	230	11	19	38	55	66	41
Total assets	4,079,752	384,122	759,030	1,301,319	2,438,390	4,472,739	10,754,478
Total liabilities	1,493,945	236,584	415,442	564,188	1,032,046	1,729,457	3,433,309
Net worth	2,585,807	147,538	343,588	737,130	1,406,344	2,743,282	7,321,169
Net worth change	82,166	27,178	25,692	38,784	37,565	37,749	294,629
Farm debt to asset ratio	39 %	64 %	56 %	47 %	45 %	41 %	34 %
Total debt to asset ratio	37 %	62 %	55 %	43 %	42 %	39 %	32 %
Change in earned net worth %	3 %	23 %	8 %	6 %	3 %	1 %	4 %
Solvency (end of year at market)							
Number of farms	230	11	19	38	55	66	41
Total assets	4,990,348	415,650	931,926	1,781,648	3,120,096	5,524,004	12,722,178
Total liabilities	1,493,945	236,584	415,442	564,188	1,032,046	1,729,457	3,433,309
Net worth	3,496,403	179,065	516,484	1,217,460	2,088,050	3,794,546	9,288,868
Total net worth change	185,330	37,913	40,958	101,929	126,486	146,777	510,082
Farm debt to asset ratio	32 %	60 %	45 %	34 %	35 %	33 %	29 %
Total debt to asset ratio	30 %	57 %	45 %	32 %	33 %	31 %	27 %
Change in total net worth %	6 %	27 %	9 %	9 %	6 %	4 %	6 %
Nonfarm Information							
Net nonfarm income	48,316	46,866	40,639	31,860	36,632	55,719	71,274
Farms reporting living expenses	45	2	6	7	15	12	3
Total family living expense	91,063	-	69,138	45,668	91,623	114,476	-
Total living, invest, cap. purch	155,100	-	83,480	48,917	132,713	191,166	-
Crop Acres							
Total crop acres	2,254	182	358	894	1,458	2,641	5,393
Total crop acres owned	480	22	67	217	352	593	1,028
Total crop acres cash rented	1,702	160	267	612	1,058	1,967	4,226
Total crop acres share rented	72	-	23	66	48	81	139
Machinery value per crop acre	532	245	357	366	403	518	623

Financial Summary Excluding Deferred Liabilities
North Dakota Farm Business Management Education Program
State Report, 2023
(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	230	35	47	51	51	46
Income Statement						
Gross cash farm income	1,279,151	389,924	1,013,896	1,601,715	1,588,291	1,526,390
Total cash farm expense	988,382	325,668	758,122	1,294,676	1,214,189	1,137,950
Net cash farm income	290,769	64,256	255,774	307,039	374,103	388,440
Inventory change	-68,437	45,210	-95,459	-23,451	-112,128	-128,734
Depreciation	-94,916	-18,977	-71,582	-120,022	-108,337	-133,824
Net farm income from operations	127,416	90,489	88,733	163,567	153,638	125,882
Gain or loss on capital sales	12,158	371	6,821	19,019	14,351	16,543
Average net farm income	139,574	90,860	95,554	182,586	167,989	142,426
Median net farm income	70,024	48,262	75,695	116,527	85,845	49,331
Profitability (cost)						
Rate of return on assets	3.1 %	9.1 %	2.9 %	3.9 %	3.3 %	1.7 %
Rate of return on equity	2.1 %	13.8 %	1.2 %	3.1 %	2.3 %	0.7 %
Operating profit margin	8.9 %	16.0 %	7.9 %	10.0 %	9.3 %	6.1 %
Asset turnover rate	34.6 %	57.1 %	36.6 %	38.9 %	35.2 %	27.2 %
Profitability (market)						
Rate of return on assets	4.6 %	10.4 %	4.1 %	6.8 %	4.4 %	2.8 %
Rate of return on equity	4.7 %	18.4 %	3.8 %	8.5 %	4.3 %	2.4 %
Operating profit margin	16.4 %	19.8 %	12.5 %	20.8 %	16.0 %	13.3 %
Asset turnover rate	28.3 %	52.3 %	32.4 %	32.9 %	27.7 %	21.1 %
Liquidity & Repayment (end of year)						
Current assets	1,113,792	307,301	748,009	1,237,161	1,284,968	1,774,601
Current liabilities	553,458	143,833	424,774	815,245	613,245	640,081
Current ratio	2.01	2.14	1.76	1.52	2.10	2.77
Working capital	560,334	163,468	323,234	421,915	671,723	1,134,520
Change in working capital	-190,393	-5,111	-140,641	-274,245	-224,167	-251,793
Working capital to gross revenue	44.9 %	38.2 %	33.8 %	26.2 %	44.1 %	77.7 %
Working capital to oper expense	58.2 %	54.4 %	43.8 %	34.0 %	56.7 %	99.3 %
Debt coverage ratio	1.42	2.10	1.14	1.36	1.36	1.76
Term debt coverage ratio	1.51	2.40	1.17	1.43	1.42	1.94
Replacement coverage ratio	1.00	1.86	0.90	1.06	0.97	0.90
Term debt to EBITDA	2.72	1.66	3.61	2.96	2.75	2.07
Solvency (end of year at cost)						
Number of farms	230	35	47	51	51	46
Total assets	4,079,752	937,808	2,951,920	4,733,984	4,993,618	5,884,167
Total liabilities	1,493,945	510,328	1,412,481	2,120,006	1,724,792	1,375,535
Net worth	2,585,807	427,481	1,539,439	2,613,977	3,268,827	4,508,631
Net worth change	82,166	64,080	60,203	97,996	144,727	31,456
Farm debt to asset ratio	39 %	54 %	50 %	48 %	38 %	25 %
Total debt to asset ratio	37 %	54 %	48 %	45 %	35 %	23 %
Change in earned net worth %	3 %	18 %	4 %	4 %	5 %	1 %
Solvency (end of year at market)						
Number of farms	230	35	47	51	51	46
Total assets	4,990,348	1,021,571	3,348,808	5,593,603	6,287,530	7,580,292
Total liabilities	1,493,945	510,328	1,412,481	2,120,006	1,724,792	1,375,535
Net worth	3,496,403	511,243	1,936,327	3,473,596	4,562,739	6,204,756
Total net worth change	185,330	81,722	103,488	286,063	265,129	147,628
Farm debt to asset ratio	32 %	50 %	44 %	40 %	30 %	19 %
Total debt to asset ratio	30 %	50 %	42 %	38 %	27 %	18 %
Change in total net worth %	6 %	19 %	6 %	9 %	6 %	2 %
Nonfarm Information						
Net nonfarm income	48,316	32,205	44,919	45,896	61,341	52,289
Farms reporting living expenses	45	9	8	9	7	12
Total family living expense	91,063	81,240	97,048	117,164	88,254	76,504
Total living, invest, cap. purch	155,100	64,108	181,041	168,560	246,499	142,639
Crop Acres						
Total crop acres	2,254	879	1,835	2,733	2,746	2,651
Total crop acres owned	480	75	308	469	593	850
Total crop acres cash rented	1,702	719	1,450	2,178	2,103	1,733
Total crop acres share rented	72	85	76	86	50	69
Machinery value per crop acre	532	249	498	497	536	662

Financial Summary Excluding Deferred Liabilities
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Farm Type)

	<u>Avg. Of All Farms</u>	<u>Crop</u>	<u>Beef</u>	<u>Crop and Beef</u>	<u>Other</u>
Number of farms	230	181	18	20	10
Income Statement					
Gross cash farm income	1,279,151	1,446,092	292,302	728,066	498,188
Total cash farm expense	988,382	1,094,102	229,796	684,637	391,873
Net cash farm income	290,769	351,989	62,506	43,428	106,315
Inventory change	-68,437	-101,838	53,391	114,526	563
Depreciation	-94,916	-109,268	-14,940	-53,780	-31,921
Net farm income from operations	127,416	140,883	100,958	104,174	74,957
Gain or loss on capital sales	12,158	14,711	1,487	1,074	4,203
Average net farm income	139,574	155,594	102,444	105,248	79,160
Median net farm income	70,024	75,695	63,150	66,919	53,160
Profitability (cost)					
Rate of return on assets	3.1 %	3.0 %	9.0 %	3.9 %	3.4 %
Rate of return on equity	2.1 %	2.1 %	11.7 %	2.7 %	3.3 %
Operating profit margin	8.9 %	8.6 %	32.3 %	12.9 %	12.4 %
Asset turnover rate	34.6 %	35.1 %	27.8 %	30.0 %	27.3 %
Profitability (market)					
Rate of return on assets	4.6 %	4.7 %	8.4 %	4.5 %	3.4 %
Rate of return on equity	4.7 %	4.8 %	9.9 %	4.2 %	3.3 %
Operating profit margin	16.4 %	16.2 %	41.1 %	19.9 %	17.0 %
Asset turnover rate	28.3 %	28.9 %	20.4 %	22.6 %	19.8 %
Liquidity & Repayment (end of year)					
Current assets	1,113,792	1,246,024	320,886	800,387	434,755
Current liabilities	553,458	598,650	136,984	499,819	213,019
Current ratio	2.01	2.08	2.34	1.60	2.04
Working capital	560,334	647,375	183,902	300,569	221,736
Change in working capital	-190,393	-234,620	58,150	-38,119	3,718
Working capital to gross revenue	44.9 %	46.8 %	52.1 %	34.3 %	42.9 %
Working capital to oper expense	58.2 %	60.7 %	86.9 %	45.9 %	57.5 %
Debt coverage ratio	1.42	1.45	2.53	1.30	1.40
Term debt coverage ratio	1.51	1.55	2.96	1.37	1.43
Replacement coverage ratio	1.00	0.98	2.06	1.10	1.26
Term debt to EBITDA	2.72	2.56	2.16	3.30	3.83
Solvency (end of year at cost)					
Number of farms	230	181	18	20	10
Total assets	4,079,752	4,563,563	1,245,242	2,830,830	1,886,531
Total liabilities	1,493,945	1,602,724	493,731	1,350,662	767,742
Net worth	2,585,807	2,960,839	751,511	1,480,168	1,118,788
Net worth change	82,166	80,129	189,872	69,261	67,007
Farm debt to asset ratio	39 %	37 %	43 %	49 %	45 %
Total debt to asset ratio	37 %	35 %	40 %	48 %	41 %
Change in earned net worth %	3 %	3 %	34 %	5 %	6 %
Solvency (end of year at market)					
Number of farms	230	181	18	20	10
Total assets	4,990,348	5,538,203	1,673,812	3,715,412	2,499,811
Total liabilities	1,493,945	1,602,724	493,731	1,350,662	767,742
Net worth	3,496,403	3,935,479	1,180,081	2,364,750	1,732,069
Total net worth change	185,330	196,921	231,251	134,186	86,754
Farm debt to asset ratio	32 %	31 %	32 %	37 %	33 %
Total debt to asset ratio	30 %	29 %	29 %	36 %	31 %
Change in total net worth %	6 %	5 %	24 %	6 %	5 %
Nonfarm Information					
Net nonfarm income	48,316	51,435	39,698	37,008	34,828
Farms reporting living expenses	45	34	5	5	1
Total family living expense	91,063	102,161	54,492	61,887	-
Total living, invest, cap. purch	155,100	186,482	56,851	62,870	-
Crop Acres					
Total crop acres	2,254	2,565	507	1,524	708
Total crop acres owned	480	527	117	501	259
Total crop acres cash rented	1,702	1,964	323	943	426
Total crop acres share rented	72	75	67	80	23
Machinery value per crop acre	532	544	445	420	527

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.

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
State Report, 2023
(Farms Sorted By Net Return)

Barley on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	14
Acres	214.88
Yield per acre (bu.)	57.78
Operators share of yield %	100.00
Value per bu.	7.06
Other product return per acre	13.78
Total product return per acre	421.51
Crop insurance per acre	92.83
Other crop income per acre	0.69
Gross return per acre	515.03
Direct Expenses	
Seed and plants	28.05
Fertilizer	84.28
Crop chemicals	37.56
Crop insurance	25.72
Drying expense	0.40
Fuel & oil	16.37
Repairs	42.62
Custom hire	1.69
Operating interest	9.39
Miscellaneous	0.40
Total direct expenses per acre	246.49
Return over direct exp per acre	268.54
Overhead Expenses	
Custom hire	5.74
Hired labor	7.16
Machinery leases	5.76
RE & pers. property taxes	7.98
Farm insurance	6.12
Utilities	4.12
Dues & professional fees	1.87
Interest	63.65
Mach & bldg depreciation	34.30
Miscellaneous	4.25
Total overhead expenses per acre	140.95
Total dir & ovhd expenses per acre	387.44
Net return per acre	127.59
Government payments	-
Net return with govt pmts	127.59
Labor & management charge	27.02
Net return over lbr & mgt	100.56
Cost of Production	
Total direct expense per bu.	4.27
Total dir & ovhd exp per bu.	6.71
Less govt & other income	4.85
With labor & management	5.32
Net value per unit	7.06
Machinery cost per acre	109.08
Est. labor hours per acre	0.91

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Barley on Cash Rent

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	29	5	6	6
Acres	278.47	100.86	333.72	378.25
Yield per acre (bu.)	75.98	48.37	67.48	88.52
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	6.47	4.75	6.94	6.85
Other product return per acre	2.17	-	-	7.71
Total product return per acre	494.01	229.69	468.02	614.31
Crop insurance per acre	44.66	25.95	9.59	103.38
Other crop income per acre	1.12	-	1.52	1.11
Gross return per acre	539.79	255.64	479.13	718.80
Direct Expenses				
Seed and plants	36.76	31.38	37.95	39.26
Fertilizer	81.84	73.72	88.02	65.93
Crop chemicals	43.70	41.78	43.17	48.46
Crop insurance	22.69	19.25	13.72	33.79
Fuel & oil	17.71	15.82	19.44	16.89
Repairs	35.78	47.04	37.67	23.80
Custom hire	1.69	3.54	2.42	0.33
Land rent	74.35	52.32	77.53	87.20
Machinery leases	0.73	-	-	-
Operating interest	9.90	2.05	8.05	14.13
Miscellaneous	0.95	3.55	0.37	-
Total direct expenses per acre	326.09	290.45	328.33	329.79
Return over direct exp per acre	213.70	-34.81	150.80	389.01
Overhead Expenses				
Custom hire	7.02	1.17	0.00	21.81
Hired labor	14.41	-	14.40	18.59
Machinery leases	7.04	1.81	7.88	12.23
Farm insurance	6.37	4.07	4.37	6.93
Utilities	4.64	3.45	3.83	5.18
Dues & professional fees	2.67	0.63	5.82	2.20
Interest	3.62	6.05	1.80	3.87
Mach & bldg depreciation	37.65	30.00	36.47	43.56
Miscellaneous	4.97	2.98	6.84	2.94
Total overhead expenses per acre	88.39	50.16	81.41	117.31
Total dir & ovhd expenses per acre	414.48	340.61	409.74	447.10
Net return per acre	125.31	-84.98	69.39	271.70
Government payments	-	-	-	-
Net return with govt pmts	125.31	-84.98	69.39	271.70
Labor & management charge	31.28	40.66	29.12	27.48
Net return over lbr & mgt	94.03	-125.64	40.27	244.22
Cost of Production				
Total direct expense per bu.	4.29	6.01	4.87	3.73
Total dir & ovhd exp per bu.	5.46	7.04	6.07	5.05
Less govt & other income	4.82	6.51	5.91	3.78
With labor & management	5.24	7.35	6.34	4.09
Net value per unit	6.47	4.75	6.94	6.85
Machinery cost per acre	108.68	105.44	101.63	120.83
Est. labor hours per acre	1.12	1.69	1.01	0.93

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Beans, Pinto on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	8
Acres	282.28
Yield per acre (cwt.)	20.90
Operators share of yield %	100.00
Value per cwt.	36.44
Total product return per acre	761.69
Crop insurance per acre	5.37
Other crop income per acre	0.90
Gross return per acre	767.95
Direct Expenses	
Seed and plants	72.94
Fertilizer	55.54
Crop chemicals	65.95
Crop insurance	33.42
Fuel & oil	19.78
Repairs	38.68
Custom hire	2.78
Machinery leases	0.72
Operating interest	6.78
Miscellaneous	1.74
Total direct expenses per acre	298.34
Return over direct exp per acre	469.61
Overhead Expenses	
Custom hire	4.85
Hired labor	12.34
Machinery leases	6.15
RE & pers. property taxes	11.20
Farm insurance	6.66
Utilities	3.94
Dues & professional fees	0.93
Interest	61.92
Mach & bldg depreciation	51.72
Miscellaneous	3.54
Total overhead expenses per acre	163.25
Total dir & ovhd expenses per acre	461.58
Net return per acre	306.37
Government payments	-
Net return with govt pmts	306.37
Labor & management charge	40.07
Net return over lbr & mgt	266.30
Cost of Production	
Total direct expense per cwt.	14.27
Total dir & ovhd exp per cwt.	22.08
Less govt & other income	21.78
With labor & management	23.70
Net value per unit	36.44
Machinery cost per acre	127.45
Est. labor hours per acre	1.16

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Beans, Pinto on Cash Rent

	<u>Avg. Of All Farms</u>
Number of farms	12
Acres	448.57
Yield per acre (cwt.)	21.30
Operators share of yield %	100.00
Value per cwt.	36.53
Total product return per acre	778.06
Crop insurance per acre	6.50
Other crop income per acre	1.37
Gross return per acre	785.94
Direct Expenses	
Seed and plants	69.58
Fertilizer	72.42
Crop chemicals	87.44
Crop insurance	34.72
Fuel & oil	22.96
Repairs	34.37
Custom hire	0.94
Land rent	90.60
Machinery leases	1.36
Operating interest	12.95
Miscellaneous	1.56
Total direct expenses per acre	428.88
Return over direct exp per acre	357.06
Overhead Expenses	
Custom hire	6.43
Hired labor	27.08
Machinery leases	7.24
Farm insurance	6.20
Utilities	4.41
Dues & professional fees	3.27
Interest	2.96
Mach & bldg depreciation	41.23
Miscellaneous	3.76
Total overhead expenses per acre	102.58
Total dir & ovhd expenses per acre	531.46
Net return per acre	254.48
Government payments	-
Net return with govt pmts	254.48
Labor & management charge	38.81
Net return over lbr & mgt	215.67
Cost of Production	
Total direct expense per cwt.	20.14
Total dir & ovhd exp per cwt.	24.95
Less govt & other income	24.58
With labor & management	26.41
Net value per unit	36.53
Machinery cost per acre	112.54
Est. labor hours per acre	1.23

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Canola on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	20
Acres	196.87
Yield per acre (cwt.)	19.77
Operators share of yield %	100.00
Value per cwt.	21.83
Total product return per acre	431.57
Crop insurance per acre	11.47
Other crop income per acre	1.87
Gross return per acre	444.91
Direct Expenses	
Seed and plants	69.12
Fertilizer	106.61
Crop chemicals	42.77
Crop insurance	24.47
Fuel & oil	17.85
Repairs	35.57
Custom hire	6.51
Machinery leases	3.35
Operating interest	8.17
Miscellaneous	1.64
Total direct expenses per acre	316.07
Return over direct exp per acre	128.84
Overhead Expenses	
Custom hire	4.29
Hired labor	4.68
Machinery leases	2.88
RE & pers. property taxes	11.36
Farm insurance	5.22
Utilities	3.26
Dues & professional fees	2.17
Interest	38.22
Mach & bldg depreciation	31.43
Miscellaneous	4.13
Total overhead expenses per acre	107.64
Total dir & ovhd expenses per acre	423.71
Net return per acre	21.21
Government payments	-
Net return with govt pmts	21.21
Labor & management charge	30.67
Net return over lbr & mgt	-9.47
Cost of Production	
Total direct expense per cwt.	15.99
Total dir & ovhd exp per cwt.	21.44
Less govt & other income	20.76
With labor & management	22.31
Net value per unit	21.83
Machinery cost per acre	104.60
Est. labor hours per acre	1.13

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Canola on Cash Rent

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	46	9	9	10
Acres	486.33	296.32	644.11	453.91
Yield per acre (cwt.)	20.25	13.89	18.39	24.84
Operators share of yield %	100.00	100.00	100.00	100.00
Value per cwt.	22.10	19.43	22.33	23.02
Other product return per acre	2.49	0.00	9.63	-
Total product return per acre	449.97	269.94	420.32	571.87
Crop insurance per acre	15.33	53.78	3.73	7.00
Other crop income per acre	1.17	4.43	-	-
Gross return per acre	466.47	328.15	424.05	578.87
Direct Expenses				
Seed and plants	68.67	71.41	72.74	56.40
Fertilizer	112.64	126.59	98.18	125.32
Crop chemicals	48.32	73.75	44.09	44.19
Crop insurance	30.02	35.30	23.78	38.21
Fuel & oil	16.04	15.84	17.11	18.06
Repairs	37.37	43.65	32.07	34.74
Custom hire	8.41	10.61	3.48	11.19
Land rent	59.16	50.59	58.02	66.93
Machinery leases	1.18	5.91	0.63	0.98
Operating interest	7.18	15.90	4.29	3.36
Miscellaneous	2.12	4.78	3.29	0.62
Total direct expenses per acre	391.11	454.32	357.70	400.02
Return over direct exp per acre	75.37	-126.17	66.36	178.86
Overhead Expenses				
Custom hire	3.90	13.97	4.30	1.61
Hired labor	9.14	5.22	8.70	13.70
Machinery leases	2.18	4.03	3.77	1.00
Building leases	0.96	0.09	2.51	0.66
Farm insurance	4.88	6.54	3.17	5.58
Utilities	2.35	2.12	1.14	2.85
Dues & professional fees	1.38	1.02	0.64	1.80
Interest	3.04	6.07	1.29	1.87
Mach & bldg depreciation	42.10	30.07	25.32	40.01
Miscellaneous	3.16	5.74	2.40	1.94
Total overhead expenses per acre	73.09	74.86	53.25	71.04
Total dir & ovhd expenses per acre	464.20	529.17	410.95	471.06
Net return per acre	2.27	-201.03	13.11	107.81
Government payments	-	-	-	-
Net return with govt pmts	2.27	-201.03	13.11	107.81
Labor & management charge	33.28	36.05	41.16	33.31
Net return over lbr & mgt	-31.01	-237.07	-28.05	74.50
Cost of Production				
Total direct expense per cwt.	19.32	32.70	19.45	16.10
Total dir & ovhd exp per cwt.	22.93	38.08	22.35	18.96
Less govt & other income	21.99	33.90	21.62	18.68
With labor & management	23.63	36.49	23.86	20.02
Net value per unit	22.10	19.43	22.33	23.02
Machinery cost per acre	111.33	128.32	86.43	106.66
Est. labor hours per acre	1.06	1.36	1.07	1.10

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Canola on Share Rent

	<u>Avg. Of All Farms</u>
Number of farms	6
Acres	224.04
Yield per acre (cwt.)	16.72
Operators share of yield %	71.38
Value per cwt.	23.26
Total product return per acre	277.65
Crop insurance per acre	17.48
Gross return per acre	295.13
Direct Expenses	
Seed and plants	55.50
Fertilizer	105.26
Crop chemicals	34.62
Crop insurance	24.12
Fuel & oil	12.04
Repairs	28.06
Custom hire	2.70
Machinery leases	16.68
Operating interest	4.02
Total direct expenses per acre	282.99
Return over direct exp per acre	12.14
Overhead Expenses	
Custom hire	0.45
Hired labor	2.80
Machinery leases	3.54
Farm insurance	4.57
Utilities	2.06
Dues & professional fees	1.17
Interest	2.08
Mach & bldg depreciation	25.72
Miscellaneous	3.14
Total overhead expenses per acre	45.52
Total dir & ovhd expenses per acre	328.51
Net return per acre	-33.38
Government payments	-
Net return with govt pmts	-33.38
Labor & management charge	32.31
Net return over lbr & mgt	-65.69
Cost of Production	
Total direct expense per cwt.	23.71
Total dir & ovhd exp per cwt.	27.52
Less govt & other income	26.06
With labor & management	28.77
Net value per unit	23.26
Machinery cost per acre	89.66
Est. labor hours per acre	1.29

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Corn on Owned Land

	<u>Ava. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	52	10	11	11
Acres	268.26	244.57	266.58	300.05
Yield per acre (bu.)	152.02	143.05	162.79	164.25
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	4.49	4.20	4.50	4.70
Other product return per acre	2.78	1.23	-	-
Total product return per acre	685.41	602.25	732.89	772.80
Hedging gains/losses per acre	0.85	-	-	3.61
Crop insurance per acre	23.72	18.39	30.55	14.66
Other crop income per acre	7.05	1.69	0.95	26.78
Gross return per acre	717.03	622.33	764.39	817.86
Direct Expenses				
Seed and plants	88.60	98.88	92.28	85.63
Fertilizer	179.16	166.59	184.72	172.44
Crop chemicals	38.42	54.66	29.01	39.65
Crop insurance	33.73	28.18	42.36	33.91
Driving expense	7.42	2.23	9.26	2.05
Storage	0.54	-	1.71	0.78
Fuel & oil	32.02	38.06	35.49	24.69
Repairs	66.92	102.53	57.67	37.51
Custom hire	5.58	3.69	5.76	5.91
Machinery leases	1.28	-	3.37	1.07
Utilities	0.59	-	2.30	0.37
Marketing	0.12	-	0.55	-
Operating interest	15.60	22.58	9.04	8.95
Miscellaneous	1.17	-	0.81	1.34
Total direct expenses per acre	471.15	517.41	474.33	414.30
Return over direct exp per acre	245.89	104.92	290.06	403.56
Overhead Expenses				
Custom hire	3.44	5.25	5.72	0.22
Hired labor	33.09	55.13	54.59	26.41
Machinery leases	5.67	7.94	0.68	6.42
RE & pers. property taxes	14.94	18.72	22.58	9.70
Farm insurance	8.99	10.66	11.38	7.56
Utilities	5.60	8.16	4.97	7.44
Dues & professional fees	3.73	5.74	6.04	3.14
Interest	63.78	88.50	63.48	47.87
Mach & bldg depreciation	63.53	50.96	70.60	75.63
Miscellaneous	7.35	11.66	2.75	10.68
Total overhead expenses per acre	210.11	262.72	242.81	195.08
Total dir & ovhd expenses per acre	681.26	780.13	717.14	609.38
Net return per acre	35.78	-157.80	47.25	208.48
Government payments	-	-	-	-
Net return with govt pmts	35.78	-157.80	47.25	208.48
Labor & management charge	48.49	47.39	45.52	49.83
Net return over lbr & mgt	-12.71	-205.19	1.73	158.65
Cost of Production				
Total direct expense per bu.	3.10	3.62	2.91	2.52
Total dir & ovhd exp per bu.	4.48	5.45	4.41	3.71
Less govt & other income	4.26	5.30	4.21	3.44
With labor & management	4.57	5.64	4.49	3.74
Net value per unit	4.50	4.20	4.50	4.73
Machinery cost per acre	178.81	211.42	178.91	147.33
Est. labor hours per acre	1.83	1.96	2.34	1.70

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Corn on Cash Rent

	<u>Ava. Of</u> <u>All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	74	14	15	15
Acres	515.31	302.33	894.04	493.79
Yield per acre (bu.)	148.35	116.70	159.04	152.28
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	4.61	4.50	4.65	4.81
Other product return per acre	1.94	0.41	-	9.74
Total product return per acre	686.25	525.27	739.88	741.80
Hedging gains/losses per acre	1.36	-	-	4.15
Crop insurance per acre	29.29	70.12	13.02	13.59
Other crop income per acre	3.02	4.15	0.12	1.31
Gross return per acre	719.93	599.54	753.01	760.85
Direct Expenses				
Seed and plants	89.77	91.77	89.74	80.90
Fertilizer	172.95	187.98	187.35	148.39
Crop chemicals	42.09	43.29	40.47	42.61
Crop insurance	33.33	28.74	37.48	27.69
Driving expense	5.18	8.47	3.05	3.34
Storage	0.53	-	0.54	-
Fuel & oil	28.55	30.04	30.43	24.41
Repairs	55.17	85.97	50.08	49.66
Custom hire	5.99	9.01	6.87	1.67
Hired labor	0.95	-	1.32	2.52
Land rent	94.57	110.28	91.94	80.60
Machinery leases	1.99	-	2.64	1.00
Utilities	0.74	-	0.84	1.14
Operating interest	16.41	17.32	18.65	16.07
Miscellaneous	1.05	-	2.04	1.06
Total direct expenses per acre	549.29	612.86	563.44	481.06
Return over direct exp per acre	170.64	-13.32	189.57	279.79
Overhead Expenses				
Custom hire	4.15	0.00	1.12	5.45
Hired labor	28.22	30.94	38.81	17.98
Machinery leases	6.19	8.64	5.32	6.06
Building leases	0.32	0.01	0.52	0.06
Farm insurance	7.13	9.74	6.00	6.81
Utilities	4.28	5.08	3.84	2.35
Dues & professional fees	4.01	6.09	5.28	0.86
Interest	3.84	8.47	3.07	3.12
Mach & bldg depreciation	60.64	51.26	75.48	44.01
Miscellaneous	5.86	8.78	4.50	2.58
Total overhead expenses per acre	124.63	129.02	143.93	89.28
Total dir & ovhd expenses per acre	673.92	741.87	707.37	570.34
Net return per acre	46.01	-142.33	45.64	190.51
Government payments	-	-	-	-
Net return with govt pmts	46.01	-142.33	45.64	190.51
Labor & management charge	44.52	43.60	47.69	39.52
Net return over lbr & mgt	1.49	-185.93	-2.05	150.98
Cost of Production				
Total direct expense per bu.	3.70	5.25	3.54	3.16
Total dir & ovhd exp per bu.	4.54	6.36	4.45	3.75
Less govt & other income	4.30	5.72	4.37	3.56
With labor & management	4.60	6.09	4.66	3.82
Net value per unit	4.62	4.50	4.65	4.83
Machinery cost per acre	161.51	190.77	166.77	132.60
Est. labor hours per acre	1.71	1.99	1.71	1.45

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Corn Silage on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	10
Acres	82.62
Yield per acre (ton)	14.44
Operators share of yield %	100.00
Value per ton	34.98
Total product return per acre	505.00
Gross return per acre	505.00
Direct Expenses	
Seed and plants	69.20
Fertilizer	72.99
Crop chemicals	33.65
Crop insurance	14.74
Fuel & oil	27.96
Repairs	66.34
Custom hire	87.91
Operating interest	9.47
Miscellaneous	0.83
Total direct expenses per acre	383.09
Return over direct exp per acre	121.91
Overhead Expenses	
Custom hire	6.63
Hired labor	6.28
Machinery leases	2.10
Building leases	0.46
RE & pers. property taxes	9.67
Farm insurance	5.02
Utilities	3.21
Dues & professional fees	1.94
Interest	29.74
Mach & bldg depreciation	27.19
Miscellaneous	10.19
Total overhead expenses per acre	102.44
Total dir & ovhd expenses per acre	485.52
Net return per acre	19.48
Government payments	-
Net return with govt pmts	19.48
Labor & management charge	34.16
Net return over lbr & mgt	-14.69
Cost of Production	
Total direct expense per ton	26.53
Total dir & ovhd exp per ton	33.63
Less govt & other income	33.63
With labor & management	35.99
Net value per unit	34.98
Machinery cost per acre	223.02
Est. labor hours per acre	1.80

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Corn Silage on Cash Rent

	<u>Avg. Of All Farms</u>
Number of farms	9
Acres	66.98
Yield per acre (ton)	15.67
Operators share of yield %	100.00
Value per ton	35.52
Other product return per acre	9.95
Total product return per acre	566.59
Crop insurance per acre	62.54
Other crop income per acre	1.34
Gross return per acre	630.47
Direct Expenses	
Seed and plants	90.08
Fertilizer	150.46
Crop chemicals	45.27
Crop insurance	18.49
Fuel & oil	36.41
Repairs	93.24
Custom hire	11.90
Land rent	71.22
Operating interest	13.32
Miscellaneous	0.12
Total direct expenses per acre	530.50
Return over direct exp per acre	99.97
Overhead Expenses	
Custom hire	6.85
Hired labor	22.72
Machinery leases	0.89
Farm insurance	11.22
Utilities	6.26
Dues & professional fees	6.38
Interest	9.45
Mach & bldg depreciation	41.59
Miscellaneous	5.78
Total overhead expenses per acre	111.13
Total dir & ovhd expenses per acre	641.63
Net return per acre	-11.16
Government payments	-
Net return with govt pmts	-11.16
Labor & management charge	53.86
Net return over lbr & mgt	-65.02
Cost of Production	
Total direct expense per ton	33.86
Total dir & ovhd exp per ton	40.95
Less govt & other income	36.24
With labor & management	39.67
Net value per unit	35.52
Machinery cost per acre	197.98
Est. labor hours per acre	2.09

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

CRP on Owned Land

	Avg. Of All Farms
Number of farms	12
Acres	96.85
Gross return per acre	85.16
Direct Expenses	
Seed and plants	1.35
Crop chemicals	0.65
Fuel & oil	0.93
Repairs	1.79
Miscellaneous	0.20
Total direct expenses per acre	4.93
Return over direct exp per acre	80.24
Overhead Expenses	
Hired labor	0.62
RE & pers. property taxes	12.61
Farm insurance	0.44
Utilities	0.46
Dues & professional fees	0.20
Interest	55.17
Mach & bldg depreciation	1.96
Miscellaneous	0.84
Total overhead expenses per acre	72.31
Total dir & ovhd expenses per acre	77.23
Net return per acre	7.93
Government payments	-
Net return with govt pmts	7.93
Labor & management charge	1.41
Net return over lbr & mgt	6.53
Net value per unit	1.00
Machinery cost per acre	4.80
Est. labor hours per acre	0.06

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Hay, Alfalfa on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	11
Acres	97.41
Yield per acre (ton)	1.98
Operators share of yield %	100.00
Value per ton	111.50
Total product return per acre	220.21
Other crop income per acre	14.96
Gross return per acre	235.16
Direct Expenses	
Fertilizer	29.12
Crop insurance	2.24
Fuel & oil	16.05
Repairs	38.79
Custom hire	4.01
Operating interest	8.15
Total direct expenses per acre	98.36
Return over direct exp per acre	136.80
Overhead Expenses	
Custom hire	3.78
Hired labor	17.44
Machinery leases	4.26
RE & pers. property taxes	12.02
Farm insurance	4.88
Utilities	3.42
Dues & professional fees	2.30
Interest	42.93
Mach & bldg depreciation	19.72
Miscellaneous	2.72
Total overhead expenses per acre	113.47
Total dir & ovhd expenses per acre	211.83
Net return per acre	23.33
Government payments	-
Net return with govt pmts	23.33
Labor & management charge	17.79
Net return over lbr & mgt	5.54
Cost of Production	
Total direct expense per ton	49.80
Total dir & ovhd exp per ton	107.25
Less govt & other income	99.68
With labor & management	108.69
Net value per unit	111.50
Machinery cost per acre	92.37
Est. labor hours per acre	0.83

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Hay, Alfalfa on Cash Rent

	<u>Avg. Of All Farms</u>
Number of farms	11
Acres	153.27
Yield per acre (ton)	2.21
Operators share of yield %	100.00
Value per ton	119.96
Total product return per acre	265.08
Gross return per acre	265.08
Direct Expenses	
Seed and plants	1.04
Fertilizer	29.21
Crop chemicals	0.54
Crop insurance	0.70
Fuel & oil	12.22
Repairs	32.30
Custom hire	3.92
Hired labor	4.47
Land rent	73.08
Utilities	1.56
Operating interest	11.81
Total direct expenses per acre	170.87
Return over direct exp per acre	94.21
Overhead Expenses	
Custom hire	1.39
Hired labor	9.13
Machinery leases	2.38
Farm insurance	6.09
Utilities	2.82
Dues & professional fees	6.88
Interest	5.81
Mach & bldg depreciation	16.71
Miscellaneous	1.68
Total overhead expenses per acre	52.91
Total dir & ovhd expenses per acre	223.78
Net return per acre	41.30
Government payments	-
Net return with govt pmts	41.30
Labor & management charge	14.07
Net return over lbr & mgt	27.23
Cost of Production	
Total direct expense per ton	77.32
Total dir & ovhd exp per ton	101.27
Less govt & other income	101.27
With labor & management	107.63
Net value per unit	119.96
Machinery cost per acre	73.07
Est. labor hours per acre	0.67

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Hay, Grass on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	9
Acres	83.13
Yield per acre (ton)	1.13
Operators share of yield %	100.00
Value per ton	95.01
Total product return per acre	107.16
Other crop income per acre	26.11
Gross return per acre	133.27
Direct Expenses	
Seed and plants	12.90
Fertilizer	37.98
Crop chemicals	2.48
Fuel & oil	14.62
Repairs	37.53
Custom hire	1.46
Machinery leases	0.23
Operating interest	9.67
Total direct expenses per acre	116.88
Return over direct exp per acre	16.39
Overhead Expenses	
Custom hire	1.99
Hired labor	23.46
Machinery leases	0.98
RE & pers. property taxes	12.23
Farm insurance	4.01
Utilities	2.12
Dues & professional fees	1.49
Interest	17.38
Mach & bldg depreciation	20.56
Miscellaneous	9.39
Total overhead expenses per acre	93.60
Total dir & ovhd expenses per acre	210.48
Net return per acre	-77.21
Government payments	-
Net return with govt pmts	-77.21
Labor & management charge	20.77
Net return over lbr & mgt	-97.98
Cost of Production	
Total direct expense per ton	103.63
Total dir & ovhd exp per ton	186.62
Less govt & other income	163.47
With labor & management	181.88
Net value per unit	95.01
Machinery cost per acre	76.79
Est. labor hours per acre	0.97

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Hay, Grass on Cash Rent

	Avg. Of All Farms
Number of farms	13
Acres	237.91
Yield per acre (ton)	1.19
Operators share of yield %	100.00
Value per ton	71.25
Total product return per acre	85.09
Gross return per acre	85.09
Direct Expenses	
Seed and plants	0.73
Fertilizer	0.39
Crop chemicals	0.60
Fuel & oil	10.38
Repairs	25.83
Custom hire	0.30
Land rent	24.03
Operating interest	7.68
Miscellaneous	0.09
Total direct expenses per acre	70.03
Return over direct exp per acre	15.06
Overhead Expenses	
Custom hire	0.95
Hired labor	7.49
Machinery leases	0.80
Farm insurance	0.85
Utilities	1.35
Dues & professional fees	1.39
Interest	1.07
Mach & bldg depreciation	14.67
Miscellaneous	19.19
Total overhead expenses per acre	47.76
Total dir & ovhd expenses per acre	117.79
Net return per acre	-32.70
Government payments	-
Net return with govt pmts	-32.70
Labor & management charge	17.07
Net return over lbr & mgt	-49.77
Cost of Production	
Total direct expense per ton	58.64
Total dir & ovhd exp per ton	98.63
Less govt & other income	98.63
With labor & management	112.93
Net value per unit	71.25
Machinery cost per acre	52.35
Est. labor hours per acre	0.80

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Hay, Mixed Alfalfa/Grass on Owned Land

	Avg. Of All Farms
Number of farms	9
Acres	140.81
Yield per acre (ton)	1.92
Operators share of yield %	100.00
Value per ton	78.97
Total product return per acre	151.98
Gross return per acre	151.98
Direct Expenses	
Crop insurance	0.10
Fuel & oil	10.99
Repairs	18.77
Custom hire	2.41
Operating interest	8.00
Total direct expenses per acre	40.27
Return over direct exp per acre	111.71
Overhead Expenses	
Custom hire	5.87
Hired labor	4.07
Machinery leases	0.78
RE & pers. property taxes	8.08
Farm insurance	5.06
Utilities	3.23
Dues & professional fees	0.59
Interest	24.72
Mach & bldg depreciation	19.19
Miscellaneous	3.35
Total overhead expenses per acre	74.95
Total dir & ovhd expenses per acre	115.22
Net return per acre	36.76
Government payments	-
Net return with govt pmts	36.76
Labor & management charge	15.24
Net return over lbr & mgt	21.52
Cost of Production	
Total direct expense per ton	20.93
Total dir & ovhd exp per ton	59.87
Less govt & other income	59.87
With labor & management	67.79
Net value per unit	78.97
Machinery cost per acre	60.66
Est. labor hours per acre	0.74

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Hay, Mixed Alfalfa/Grass on Cash Rent

	Avg. Of All Farms
Number of farms	13
Acres	179.42
Yield per acre (ton)	1.33
Operators share of yield %	100.00
Value per ton	81.62
Total product return per acre	108.17
Gross return per acre	108.17
Direct Expenses	
Fuel & oil	11.39
Repairs	15.37
Land rent	26.66
Operating interest	8.48
Miscellaneous	0.41
Total direct expenses per acre	62.31
Return over direct exp per acre	45.86
Overhead Expenses	
Custom hire	4.92
Hired labor	1.16
Machinery leases	0.23
Farm insurance	3.25
Utilities	2.24
Dues & professional fees	1.39
Interest	3.97
Mach & bldg depreciation	11.70
Miscellaneous	1.11
Total overhead expenses per acre	29.97
Total dir & ovhd expenses per acre	92.28
Net return per acre	15.89
Government payments	-
Net return with govt pmts	15.89
Labor & management charge	16.01
Net return over lbr & mgt	-0.12
Cost of Production	
Total direct expense per ton	47.02
Total dir & ovhd exp per ton	69.63
Less govt & other income	69.63
With labor & management	81.71
Net value per unit	81.62
Machinery cost per acre	46.40
Est. labor hours per acre	0.72

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Hay, Small Grain on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	7
Acres	59.00
Yield per acre (ton)	2.29
Operators share of yield %	100.00
Value per ton	80.00
Other product return per acre	1.69
Total product return per acre	185.14
Crop insurance per acre	24.16
Gross return per acre	209.31
Direct Expenses	
Seed and plants	26.58
Fertilizer	43.37
Crop chemicals	13.94
Crop insurance	0.75
Fuel & oil	16.39
Repairs	33.21
Custom hire	2.34
Operating interest	6.69
Miscellaneous	1.14
Total direct expenses per acre	144.40
Return over direct exp per acre	64.90
Overhead Expenses	
Custom hire	1.26
Hired labor	6.29
Machinery leases	1.24
Building leases	0.22
RE & pers. property taxes	7.24
Farm insurance	5.03
Utilities	2.99
Dues & professional fees	1.12
Interest	18.21
Mach & bldg depreciation	16.43
Miscellaneous	3.14
Total overhead expenses per acre	63.17
Total dir & ovhd expenses per acre	207.58
Net return per acre	1.73
Government payments	-
Net return with govt pmts	1.73
Labor & management charge	22.43
Net return over lbr & mgt	-20.70
Cost of Production	
Total direct expense per ton	62.97
Total dir & ovhd exp per ton	90.52
Less govt & other income	79.24
With labor & management	89.02
Net value per unit	80.00
Machinery cost per acre	74.33
Est. labor hours per acre	1.22

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Hay, Small Grain on Cash Rent

	<u>Avg. Of All Farms</u>
Number of farms	12
Acres	101.66
Yield per acre (ton)	2.09
Operators share of yield %	100.00
Value per ton	75.21
Total product return per acre	157.26
Crop insurance per acre	4.98
Other crop income per acre	2.67
Gross return per acre	164.90
Direct Expenses	
Seed and plants	22.02
Fertilizer	32.28
Crop chemicals	13.49
Crop insurance	4.28
Fuel & oil	9.92
Repairs	15.22
Custom hire	7.41
Land rent	39.17
Operating interest	4.59
Total direct expenses per acre	148.37
Return over direct exp per acre	16.53
Overhead Expenses	
Custom hire	6.01
Hired labor	0.99
Machinery leases	5.57
Farm insurance	3.50
Utilities	2.45
Dues & professional fees	0.79
Interest	3.11
Mach & bldg depreciation	19.51
Miscellaneous	2.65
Total overhead expenses per acre	44.57
Total dir & ovhd expenses per acre	192.94
Net return per acre	-28.04
Government payments	-
Net return with govt pmts	-28.04
Labor & management charge	20.97
Net return over lbr & mgt	-49.01
Cost of Production	
Total direct expense per ton	70.96
Total dir & ovhd exp per ton	92.27
Less govt & other income	88.62
With labor & management	98.65
Net value per unit	75.21
Machinery cost per acre	64.66
Est. labor hours per acre	0.88

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Oats on Cash Rent

	<u>Avg. Of All Farms</u>
Number of farms	10
Acres	285.11
Yield per acre (bu.)	117.33
Operators share of yield %	100.00
Value per bu.	3.93
Other product return per acre	3.37
Total product return per acre	464.56
Crop insurance per acre	9.87
Gross return per acre	474.44
Direct Expenses	
Seed and plants	26.29
Fertilizer	103.88
Crop chemicals	43.98
Crop insurance	34.52
Fuel & oil	20.18
Repairs	38.46
Custom hire	8.36
Land rent	57.89
Operating interest	7.65
Miscellaneous	0.54
Total direct expenses per acre	341.74
Return over direct exp per acre	132.70
Overhead Expenses	
Custom hire	1.57
Hired labor	8.38
Machinery leases	0.73
Building leases	0.23
Farm insurance	5.56
Utilities	2.85
Dues & professional fees	1.69
Interest	2.95
Mach & bldg depreciation	55.09
Miscellaneous	3.65
Total overhead expenses per acre	82.71
Total dir & ovhd expenses per acre	424.45
Net return per acre	49.99
Government payments	-
Net return with govt pmts	49.99
Labor & management charge	32.39
Net return over lbr & mgt	17.60
Cost of Production	
Total direct expense per bu.	2.91
Total dir & ovhd exp per bu.	3.62
Less govt & other income	3.50
With labor & management	3.78
Net value per unit	3.93
Machinery cost per acre	123.43
Est. labor hours per acre	1.07

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Pasture on Owned Land

	Avg. Of All Farms
Number of farms	19
Acres	457.25
Yield per acre (aum)	1.03
Operators share of yield %	100.00
Value per aum	25.08
Total product return per acre	25.84
Crop insurance per acre	0.87
Gross return per acre	26.70
 Direct Expenses	
Crop chemicals	0.08
Crop insurance	1.50
Fuel & oil	0.53
Repairs	1.16
Miscellaneous	0.21
Total direct expenses per acre	3.48
Return over direct exp per acre	23.22
 Overhead Expenses	
RE & pers. property taxes	4.09
Interest	8.04
Mach & bldg depreciation	0.95
Miscellaneous	1.15
Total overhead expenses per acre	14.22
Total dir & ovhd expenses per acre	17.70
Net return per acre	9.00
 Government payments	
Net return with govt pmts	-
Labor & management charge	9.00
Net return over lbr & mgt	0.82
	8.18
 Cost of Production	
Total direct expense per aum	3.38
Total dir & ovhd exp per aum	17.18
Less govt & other income	16.34
With labor & management	17.14
 Net value per unit	
Machinery cost per acre	25.08
Est. labor hours per acre	2.93
	0.05

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Pasture on Cash Rent

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	32	6	7	7
Acres	1,113.66	1,064.67	420.43	1,767.57
Yield per acre (aum)	0.88	0.82	0.73	0.92
Operators share of yield %	100.00	100.00	100.00	100.00
Value per aum	24.36	22.57	26.88	24.86
Other product return per acre	0.04	-	-	-
Total product return per acre	21.49	18.47	19.73	22.79
Crop insurance per acre	2.63	0.57	-	7.29
Gross return per acre	24.12	19.04	19.73	30.07
Direct Expenses				
Crop insurance	0.50	0.89	-	0.49
Fuel & oil	0.58	0.39	0.66	0.60
Repairs	0.99	0.87	0.92	0.67
Land rent	19.81	24.67	19.82	16.37
Miscellaneous	0.35	0.43	0.22	0.29
Total direct expenses per acre	22.23	27.25	21.61	18.42
Return over direct exp per acre	1.88	-8.21	-1.89	11.65
Overhead Expenses				
Mach & bldg depreciation	0.88	0.56	0.40	1.25
Miscellaneous	1.18	1.47	0.61	1.33
Total overhead expenses per acre	2.06	2.03	1.01	2.58
Total dir & ovhd expenses per acre	24.30	29.28	22.62	21.00
Net return per acre	-0.18	-10.24	-2.89	9.07
Government payments	-	-	-	-
Net return with govt pmts	-0.18	-10.24	-2.89	9.07
Labor & management charge	0.91	0.75	1.39	0.88
Net return over lbr & mgt	-1.09	-10.99	-4.28	8.19
Cost of Production				
Total direct expense per aum	25.25	33.30	29.45	20.09
Total dir & ovhd exp per aum	27.60	35.78	30.82	22.91
Less govt & other income	24.56	35.09	30.82	14.96
With labor & management	25.59	36.00	32.71	15.92
Net value per unit	24.36	22.57	26.88	24.86
Machinery cost per acre	2.76	2.38	2.14	2.81
Est. labor hours per acre	0.04	0.04	0.06	0.04

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Peas, Dry Edible on Cash Rent

	<u>Avg. Of All Farms</u>
Number of farms	7
Acres	368.79
Yield per acre (bu.)	79.60
Operators share of yield %	100.00
Value per bu.	3.88
Total product return per acre	309.23
Crop insurance per acre	14.87
Other crop income per acre	5.43
Gross return per acre	329.53
Direct Expenses	
Seed and plants	52.29
Fertilizer	14.92
Crop chemicals	49.23
Crop insurance	20.97
Fuel & oil	19.11
Repairs	36.19
Custom hire	3.83
Land rent	44.29
Operating interest	14.27
Miscellaneous	13.32
Total direct expenses per acre	268.42
Return over direct exp per acre	61.11
Overhead Expenses	
Custom hire	3.23
Hired labor	5.31
Machinery leases	6.24
Building leases	2.07
Farm insurance	4.59
Utilities	3.18
Dues & professional fees	0.60
Interest	5.38
Mach & bldg depreciation	30.34
Miscellaneous	2.30
Total overhead expenses per acre	63.23
Total dir & ovhd expenses per acre	331.65
Net return per acre	-2.12
Government payments	-
Net return with govt pmts	-2.12
Labor & management charge	38.34
Net return over lbr & mgt	-40.46
Cost of Production	
Total direct expense per bu.	3.37
Total dir & ovhd exp per bu.	4.17
Less govt & other income	3.91
With labor & management	4.39
Net value per unit	3.88
Machinery cost per acre	102.66
Est. labor hours per acre	1.02

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Prevented planting on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	19
Acres	73.80
Yield per acre	-
Operators share of yield %	-
Value per 0	-
Total product return per acre	-
Crop insurance per acre	253.47
Other crop income per acre	2.23
Gross return per acre	255.70
Direct Expenses	
Seed and plants	0.60
Fertilizer	3.73
Crop chemicals	14.66
Crop insurance	22.39
Fuel & oil	5.03
Repairs	12.24
Operating interest	1.87
Miscellaneous	0.51
Total direct expenses per acre	61.03
Return over direct exp per acre	194.67
Overhead Expenses	
Custom hire	0.37
Hired labor	3.87
Machinery leases	0.35
RE & pers. property taxes	7.75
Farm insurance	5.14
Utilities	3.69
Dues & professional fees	2.33
Interest	74.84
Mach & bldg depreciation	11.06
Miscellaneous	2.95
Total overhead expenses per acre	112.34
Total dir & ovhd expenses per acre	173.37
Net return per acre	82.32
Government payments	-
Net return with govt pmts	82.32
Labor & management charge	9.82
Net return over lbr & mgt	72.50
Net value per unit	-
Machinery cost per acre	32.63
Est. labor hours per acre	0.31

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Prevented planting on Cash Rent

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	37	7	8	8
Acres	181.52	121.39	257.25	149.57
Yield per acre	-	-	-	-
Operators share of yield %	-	-	-	-
Value per 0	-	-	-	-
Total product return per acre	-	-	-	-
Crop insurance per acre	306.20	131.86	261.33	626.44
Other crop income per acre	2.19	-	2.14	1.56
Gross return per acre	308.39	131.86	263.46	628.00
Direct Expenses				
Seed and plants	2.82	-	-	15.83
Fertilizer	2.36	18.67	-	-
Crop chemicals	7.24	9.52	12.00	-
Crop insurance	40.75	33.10	13.76	136.35
Fuel & oil	5.43	5.60	6.62	4.64
Repairs	10.63	12.60	13.74	7.16
Custom hire	0.15	-	-	0.83
Land rent	61.61	56.94	68.89	81.70
Machinery leases	0.49	-	0.80	-
Organic certification	0.18	-	-	0.99
Operating interest	1.86	3.30	1.56	1.98
Miscellaneous	0.10	-	0.17	0.27
Total direct expenses per acre	133.62	139.73	117.54	249.76
Return over direct exp per acre	174.77	-7.87	145.93	378.25
Overhead Expenses				
Custom hire	0.71	0.26	0.93	0.00
Hired labor	4.19	3.11	4.88	6.58
Machinery leases	0.75	1.76	0.14	0.95
Farm insurance	4.60	7.39	4.92	3.46
Utilities	3.02	4.98	2.62	2.45
Dues & professional fees	2.86	1.44	3.53	5.83
Interest	3.87	5.04	2.19	1.46
Mach & bldg depreciation	14.03	12.69	11.46	15.57
Miscellaneous	3.19	2.82	2.17	2.18
Total overhead expenses per acre	37.21	39.49	32.84	38.47
Total dir & ovhd expenses per acre	170.83	179.23	150.38	288.23
Net return per acre	137.55	-47.37	113.09	339.77
Government payments	-	-	-	-
Net return with govt pmts	137.55	-47.37	113.09	339.77
Labor & management charge	9.50	9.57	9.48	9.10
Net return over lbr & mgt	128.05	-56.94	103.60	330.67
Net value per unit	-	-	-	-
Machinery cost per acre	34.84	37.11	35.40	29.00
Est. labor hours per acre	0.36	0.34	0.39	0.42

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Soybeans on Owned Land

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	77	15	16	16
Acres	326.19	240.10	359.18	380.30
Yield per acre (bu.)	36.67	23.44	33.12	44.74
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	12.29	11.84	12.56	12.53
Other product return per acre	1.96	-	8.55	-
Total product return per acre	452.60	277.43	424.33	560.59
Hedging gains/losses per acre	0.28	-	-	1.15
Crop insurance per acre	23.14	38.79	37.02	17.00
Other crop income per acre	1.18	2.09	-	2.67
Gross return per acre	477.20	318.31	461.35	581.41
Direct Expenses				
Seed and plants	65.63	87.38	59.77	61.47
Fertilizer	15.80	23.81	14.43	15.33
Crop chemicals	45.16	51.71	40.38	36.89
Crop insurance	22.64	28.97	25.67	16.70
Storage	0.23	-	0.12	0.85
Fuel & oil	16.97	13.73	15.58	18.58
Repairs	35.55	42.72	33.12	28.92
Custom hire	3.06	4.95	4.22	2.71
Machinery leases	1.30	0.97	0.43	0.33
Operating interest	6.84	9.25	7.34	2.75
Miscellaneous	1.38	2.30	0.43	1.26
Total direct expenses per acre	214.55	265.80	201.49	185.78
Return over direct exp per acre	262.65	52.52	259.86	395.63
Overhead Expenses				
Custom hire	1.30	4.25	0.14	0.35
Hired labor	13.23	9.57	7.54	18.95
Machinery leases	2.69	1.72	2.09	4.08
RE & pers. property taxes	11.52	11.06	10.63	7.37
Farm insurance	6.45	6.83	6.06	5.91
Utilities	3.96	3.27	5.10	2.73
Dues & professional fees	2.35	1.81	1.84	3.07
Interest	45.75	65.79	66.72	14.41
Mach & bldg depreciation	40.94	39.99	40.63	43.31
Miscellaneous	5.37	3.81	6.98	4.76
Total overhead expenses per acre	133.56	148.10	147.73	104.94
Total dir & ovhd expenses per acre	348.10	413.89	349.21	290.72
Net return per acre	129.10	-95.58	112.14	290.69
Government payments	-	-	-	-
Net return with govt pmts	129.10	-95.58	112.14	290.69
Labor & management charge	30.12	30.10	29.51	30.03
Net return over lbr & mgt	98.98	-125.68	82.62	260.66
Cost of Production				
Total direct expense per bu.	5.85	11.34	6.08	4.15
Total dir & ovhd exp per bu.	9.49	17.66	10.55	6.50
Less govt & other income	8.77	15.92	9.17	6.03
With labor & management	9.59	17.20	10.06	6.70
Net value per unit	12.30	11.84	12.56	12.56
Machinery cost per acre	102.98	111.94	99.02	96.13
Est. labor hours per acre	1.13	1.22	0.92	1.23

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(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	118	23	23	24
Acres	691.19	519.46	867.23	731.96
Yield per acre (bu.)	35.99	22.31	36.40	45.67
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	12.32	11.91	12.26	12.44
Total product return per acre	443.51	265.66	446.08	567.89
Hedging gains/losses per acre	0.51	-	-	2.36
Crop insurance per acre	18.70	44.67	12.44	7.73
Other crop income per acre	1.19	2.00	-	2.67
Gross return per acre	463.91	312.32	458.52	580.64
Direct Expenses				
Seed and plants	64.88	76.75	61.48	62.23
Fertilizer	14.52	19.34	9.83	18.06
Crop chemicals	42.48	49.06	45.65	43.40
Crop insurance	21.34	24.14	20.38	18.43
Fuel & oil	17.32	16.41	17.64	16.58
Repairs	33.92	45.88	34.51	28.98
Custom hire	2.58	3.35	2.19	3.61
Hired labor	0.24	-	-	1.00
Land rent	79.79	67.44	83.39	80.09
Machinery leases	1.19	1.05	0.42	0.95
Operating interest	7.52	11.35	8.11	5.76
Miscellaneous	1.49	1.21	1.39	1.10
Total direct expenses per acre	287.27	315.99	284.99	280.19
Return over direct exp per acre	176.63	-3.67	173.52	300.45
Overhead Expenses				
Custom hire	2.03	3.54	0.90	0.82
Hired labor	13.90	12.49	14.53	11.27
Machinery leases	4.20	6.55	4.14	2.82
Building leases	0.30	0.16	0.75	0.10
Farm insurance	5.89	7.23	5.54	4.92
Utilities	3.23	3.52	3.69	3.31
Dues & professional fees	2.75	1.90	4.18	1.21
Interest	3.40	3.93	2.62	2.92
Mach & bldg depreciation	37.01	42.89	39.98	36.93
Miscellaneous	4.62	3.48	4.16	4.59
Total overhead expenses per acre	77.32	85.70	80.49	68.90
Total dir & ovhd expenses per acre	364.60	401.69	365.48	349.09
Net return per acre	99.31	-89.37	93.04	231.56
Government payments	-	-	-	-
Net return with govt pmts	99.31	-89.37	93.04	231.56
Labor & management charge	28.13	31.92	27.45	30.19
Net return over lbr & mgt	71.18	-121.28	65.59	201.37
Cost of Production				
Total direct expense per bu.	7.98	14.16	7.83	6.14
Total dir & ovhd exp per bu.	10.13	18.00	10.04	7.64
Less govt & other income	9.56	15.91	9.70	7.36
With labor & management	10.35	17.34	10.45	8.03
Net value per unit	12.34	11.91	12.26	12.49
Machinery cost per acre	98.69	120.72	98.89	90.58
Est. labor hours per acre	1.13	1.20	1.03	1.08

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Soybeans on Share Rent

	<u>Avg. Of All Farms</u>
Number of farms	13
Acres	269.78
Yield per acre (bu.)	31.66
Operators share of yield %	71.53
Value per bu.	12.56
Total product return per acre	284.49
Crop insurance per acre	48.91
Gross return per acre	333.40
Direct Expenses	
Seed and plants	62.35
Fertilizer	18.31
Crop chemicals	37.43
Crop insurance	24.08
Fuel & oil	13.87
Repairs	21.25
Custom hire	3.20
Machinery leases	2.35
Operating interest	3.52
Miscellaneous	0.32
Total direct expenses per acre	186.69
Return over direct exp per acre	146.71
Overhead Expenses	
Custom hire	1.34
Hired labor	11.14
Machinery leases	2.32
Building leases	0.49
Farm insurance	5.63
Utilities	4.06
Dues & professional fees	1.34
Interest	2.47
Mach & bldg depreciation	53.32
Miscellaneous	2.68
Total overhead expenses per acre	84.79
Total dir & ovhd expenses per acre	271.49
Net return per acre	61.91
Government payments	-
Net return with govt pmts	61.91
Labor & management charge	27.43
Net return over lbr & mgt	34.49
Cost of Production	
Total direct expense per bu.	8.24
Total dir & ovhd exp per bu.	11.99
Less govt & other income	9.83
With labor & management	11.04
Net value per unit	12.56
Machinery cost per acre	96.03
Est. labor hours per acre	0.97

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Sugar Beets on Cash Rent

	<u>Avg. Of All Farms</u>
Number of farms	8
Acres	265.21
Yield per acre (ton)	24.77
Operators share of yield %	100.00
Value per ton	64.63
Total product return per acre	1,600.77
Crop insurance per acre	78.55
Other crop income per acre	4.51
Gross return per acre	1,683.84
Direct Expenses	
Seed and plants	263.08
Fertilizer	159.05
Crop chemicals	149.64
Crop insurance	42.43
Fuel & oil	76.43
Repairs	165.14
Custom hire	16.36
Hired labor	18.48
Land rent	132.42
Machinery leases	7.26
Utilities	1.30
Operating interest	28.82
Miscellaneous	1.39
Total direct expenses per acre	1,061.81
Return over direct exp per acre	622.03
Overhead Expenses	
Custom hire	3.78
Hired labor	48.25
Machinery leases	2.18
Building leases	0.57
Farm insurance	18.27
Utilities	4.75
Dues & professional fees	8.52
Interest	14.50
Mach & bldg depreciation	105.94
Miscellaneous	30.35
Total overhead expenses per acre	237.10
Total dir & ovhd expenses per acre	1,298.91
Net return per acre	384.93
Government payments	-
Net return with govt pmts	384.93
Labor & management charge	111.70
Net return over lbr & mgt	273.23
Cost of Production	
Total direct expense per ton	42.87
Total dir & ovhd exp per ton	52.44
Less govt & other income	49.09
With labor & management	53.60
Net value per unit	64.63
Machinery cost per acre	387.15
Est. labor hours per acre	4.18

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Sunflowers on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	7
Acres	460.51
Yield per acre (cwt.)	23.99
Operators share of yield %	100.00
Value per cwt.	18.34
Total product return per acre	440.06
Crop insurance per acre	13.41
Gross return per acre	453.47
Direct Expenses	
Seed and plants	36.52
Fertilizer	84.37
Crop chemicals	48.05
Crop insurance	26.11
Drying expense	2.15
Fuel & oil	21.32
Repairs	28.35
Custom hire	11.56
Operating interest	2.46
Total direct expenses per acre	260.88
Return over direct exp per acre	192.58
Overhead Expenses	
Custom hire	2.14
Hired labor	13.49
RE & pers. property taxes	7.38
Farm insurance	5.65
Utilities	2.39
Dues & professional fees	2.03
Interest	13.42
Mach & bldg depreciation	32.87
Miscellaneous	9.08
Total overhead expenses per acre	88.44
Total dir & ovhd expenses per acre	349.32
Net return per acre	104.14
Government payments	-
Net return with govt pmts	104.14
Labor & management charge	17.36
Net return over lbr & mgt	86.79
Cost of Production	
Total direct expense per cwt.	10.87
Total dir & ovhd exp per cwt.	14.56
Less govt & other income	14.00
With labor & management	14.72
Net value per unit	18.34
Machinery cost per acre	89.73
Est. labor hours per acre	1.33

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Sunflowers on Cash Rent

	<u>Avg. Of All Farms</u>
Number of farms	19
Acres	484.16
Yield per acre (cwt.)	21.54
Operators share of yield %	100.00
Value per cwt.	19.71
Total product return per acre	424.70
Crop insurance per acre	4.11
Gross return per acre	428.81
Direct Expenses	
Seed and plants	38.93
Fertilizer	78.87
Crop chemicals	49.84
Crop insurance	23.88
Storage	0.18
Fuel & oil	21.90
Repairs	35.67
Custom hire	8.47
Hired labor	2.67
Land rent	65.46
Machinery leases	0.38
Operating interest	6.38
Miscellaneous	1.40
Total direct expenses per acre	334.04
Return over direct exp per acre	94.77
Overhead Expenses	
Custom hire	6.53
Hired labor	14.22
Machinery leases	3.85
Farm insurance	4.52
Utilities	3.43
Dues & professional fees	2.15
Interest	2.87
Mach & bldg depreciation	46.46
Miscellaneous	5.23
Total overhead expenses per acre	89.27
Total dir & ovhd expenses per acre	423.30
Net return per acre	5.51
Government payments	-
Net return with govt pmts	5.51
Labor & management charge	31.65
Net return over lbr & mgt	-26.15
Cost of Production	
Total direct expense per cwt.	15.50
Total dir & ovhd exp per cwt.	19.65
Less govt & other income	19.46
With labor & management	20.93
Net value per unit	19.71
Machinery cost per acre	121.06
Est. labor hours per acre	1.27

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Wheat, Durum on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	5
Acres	231.28
Yield per acre (bu.)	51.34
Operators share of yield %	100.00
Value per bu.	10.40
Other product return per acre	8.23
Total product return per acre	542.12
Other crop income per acre	0.59
Gross return per acre	542.70
Direct Expenses	
Seed and plants	22.81
Fertilizer	107.54
Crop chemicals	45.03
Crop insurance	15.61
Fuel & oil	18.18
Repairs	41.30
Custom hire	2.98
Operating interest	7.65
Miscellaneous	0.33
Total direct expenses per acre	261.43
Return over direct exp per acre	281.27
Overhead Expenses	
Custom hire	5.66
Hired labor	15.38
Machinery leases	1.45
RE & pers. property taxes	7.07
Farm insurance	4.52
Utilities	3.03
Dues & professional fees	1.65
Interest	25.88
Mach & bldg depreciation	47.49
Miscellaneous	6.47
Total overhead expenses per acre	118.60
Total dir & ovhd expenses per acre	380.04
Net return per acre	162.66
Government payments	-
Net return with govt pmts	162.66
Labor & management charge	32.57
Net return over lbr & mgt	130.10
Cost of Production	
Total direct expense per bu.	5.09
Total dir & ovhd exp per bu.	7.40
Less govt & other income	7.23
With labor & management	7.87
Net value per unit	10.40
Machinery cost per acre	117.27
Est. labor hours per acre	1.00

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Wheat, Durum on Cash Rent

	<u>Avg. Of All Farms</u>
Number of farms	10
Acres	813.86
Yield per acre (bu.)	48.73
Operators share of yield %	100.00
Value per bu.	10.13
Other product return per acre	6.57
Total product return per acre	500.29
Other crop income per acre	1.02
Gross return per acre	501.31
Direct Expenses	
Seed and plants	26.74
Fertilizer	93.65
Crop chemicals	51.82
Crop insurance	19.01
Fuel & oil	16.88
Repairs	34.77
Custom hire	3.47
Hired labor	0.78
Land rent	67.55
Machinery leases	0.11
Operating interest	9.58
Miscellaneous	0.50
Total direct expenses per acre	324.88
Return over direct exp per acre	176.43
Overhead Expenses	
Custom hire	9.00
Hired labor	9.84
Machinery leases	4.10
Farm insurance	5.14
Utilities	2.98
Dues & professional fees	1.30
Interest	4.50
Mach & bldg depreciation	36.41
Miscellaneous	4.37
Total overhead expenses per acre	77.65
Total dir & ovhd expenses per acre	402.53
Net return per acre	98.79
Government payments	-
Net return with govt pmts	98.79
Labor & management charge	28.05
Net return over lbr & mgt	70.74
Cost of Production	
Total direct expense per bu.	6.67
Total dir & ovhd exp per bu.	8.26
Less govt & other income	8.10
With labor & management	8.68
Net value per unit	10.13
Machinery cost per acre	107.17
Est. labor hours per acre	0.87

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Wheat, Spring on Owned Land

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	67	13	14	14
Acres	298.92	332.13	232.91	432.26
Yield per acre (bu.)	57.30	50.18	49.59	70.49
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	6.88	6.61	6.74	7.01
Other product return per acre	1.71	-	2.68	-
Total product return per acre	396.11	331.59	336.69	494.41
Hedging gains/losses per acre	0.82	-	3.59	0.77
Crop insurance per acre	25.07	20.43	18.12	39.59
Other crop income per acre	2.50	3.33	3.27	1.07
Gross return per acre	424.50	355.35	361.67	535.84
Direct Expenses				
Seed and plants	24.31	29.22	21.11	22.81
Fertilizer	101.56	104.90	95.00	101.88
Crop chemicals	43.22	46.78	37.48	45.64
Crop insurance	24.90	36.10	18.91	20.97
Fuel & oil	16.77	16.93	17.93	16.85
Repairs	31.77	45.84	42.02	20.43
Custom hire	5.08	7.62	2.92	5.31
Machinery leases	2.01	0.54	0.01	1.90
Operating interest	5.03	11.81	3.58	1.74
Miscellaneous	1.33	2.99	0.35	1.17
Total direct expenses per acre	255.97	302.72	239.31	238.70
Return over direct exp per acre	168.53	52.62	122.37	297.14
Overhead Expenses				
Custom hire	1.66	0.03	2.80	0.11
Hired labor	9.22	11.30	5.34	13.63
Machinery leases	2.51	1.05	1.29	1.96
Building leases	0.36	0.77	0.33	0.38
RE & pers. property taxes	9.15	9.87	9.11	8.46
Farm insurance	6.28	6.70	4.95	5.79
Utilities	3.70	3.70	3.40	3.02
Dues & professional fees	1.94	2.17	1.27	2.19
Interest	34.38	71.21	17.00	23.17
Mach & bldg depreciation	35.18	34.64	27.27	42.90
Miscellaneous	5.40	4.53	4.09	4.70
Total overhead expenses per acre	109.78	145.97	76.84	106.31
Total dir & ovhd expenses per acre	365.75	448.70	316.15	345.01
Net return per acre	58.74	-93.35	45.52	190.83
Government payments	-	-	-	-
Net return with govt pmts	58.74	-93.35	45.52	190.83
Labor & management charge	29.33	30.87	29.74	22.78
Net return over lbr & mgt	29.42	-124.22	15.79	168.05
Cost of Production				
Total direct expense per bu.	4.47	6.03	4.83	3.39
Total dir & ovhd exp per bu.	6.38	8.94	6.38	4.89
Less govt & other income	5.86	8.47	5.82	4.31
With labor & management	6.37	9.08	6.42	4.63
Net value per unit	6.90	6.61	6.81	7.02
Machinery cost per acre	95.52	110.91	95.74	87.06
Est. labor hours per acre	1.21	1.08	1.32	1.13

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Wheat, Spring on Cash Rent

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	95	19	19	19
Acres	699.81	522.37	843.75	708.56
Yield per acre (bu.)	58.41	47.05	60.61	68.08
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	7.06	6.80	6.92	7.38
Other product return per acre	1.57	3.49	-	5.20
Total product return per acre	414.09	323.31	419.12	507.58
Hedging gains/losses per acre	0.35	-	-	1.75
Crop insurance per acre	14.90	17.95	11.25	7.24
Other crop income per acre	1.30	0.63	1.57	0.64
Gross return per acre	430.65	341.89	431.95	517.20
Direct Expenses				
Seed and plants	26.29	32.44	21.71	26.14
Fertilizer	108.50	114.21	106.71	101.90
Crop chemicals	48.53	49.90	49.89	47.46
Crop insurance	24.62	26.17	25.79	22.24
Fuel & oil	16.77	18.49	17.17	16.77
Repairs	30.05	38.13	28.21	22.77
Custom hire	5.60	7.73	2.78	4.94
Land rent	63.31	66.04	63.26	70.86
Machinery leases	0.95	1.59	0.29	1.55
Operating interest	6.62	13.49	4.76	3.62
Miscellaneous	1.99	1.83	0.35	1.27
Total direct expenses per acre	333.23	370.02	320.93	319.52
Return over direct exp per acre	97.42	-28.12	111.02	197.68
Overhead Expenses				
Custom hire	2.33	0.76	5.71	1.08
Hired labor	10.11	13.62	10.66	14.50
Machinery leases	3.37	6.47	3.50	4.14
Farm insurance	5.49	5.72	5.26	5.19
Utilities	3.24	4.83	2.92	3.04
Dues & professional fees	1.67	1.37	0.83	2.45
Interest	3.85	7.03	2.62	1.84
Mach & bldg depreciation	37.94	38.08	52.55	31.32
Miscellaneous	5.73	8.28	5.44	4.08
Total overhead expenses per acre	73.72	86.16	89.50	67.64
Total dir & ovhd expenses per acre	406.95	456.18	410.42	387.17
Net return per acre	23.69	-114.28	21.52	130.03
Government payments	-	-	-	-
Net return with govt pmts	23.69	-114.28	21.52	130.03
Labor & management charge	29.19	29.56	29.20	28.36
Net return over lbr & mgt	-5.49	-143.85	-7.67	101.68
Cost of Production				
Total direct expense per bu.	5.70	7.86	5.29	4.69
Total dir & ovhd exp per bu.	6.97	9.70	6.77	5.69
Less govt & other income	6.66	9.23	6.56	5.47
With labor & management	7.16	9.85	7.04	5.89
Net value per unit	7.07	6.80	6.92	7.40
Machinery cost per acre	97.56	114.52	107.87	80.37
Est. labor hours per acre	1.10	1.12	0.98	1.22

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Wheat, Spring on Share Rent

	<u>Avg. Of All Farms</u>
Number of farms	17
Acres	271.44
Yield per acre (bu.)	58.79
Operators share of yield %	69.06
Value per bu.	7.15
Total product return per acre	290.11
Crop insurance per acre	2.63
Other crop income per acre	3.66
Gross return per acre	296.40
Direct Expenses	
Seed and plants	20.88
Fertilizer	85.05
Crop chemicals	39.43
Crop insurance	19.61
Fuel & oil	15.18
Repairs	26.11
Custom hire	3.94
Machinery leases	2.94
Operating interest	4.02
Miscellaneous	0.70
Total direct expenses per acre	217.85
Return over direct exp per acre	78.55
Overhead Expenses	
Custom hire	1.15
Hired labor	10.67
Machinery leases	1.57
Building leases	0.43
Farm insurance	5.65
Utilities	3.58
Dues & professional fees	1.42
Interest	2.59
Mach & bldg depreciation	45.44
Miscellaneous	3.12
Total overhead expenses per acre	75.61
Total dir & ovhd expenses per acre	293.46
Net return per acre	2.94
Government payments	-
Net return with govt pmts	2.94
Labor & management charge	26.14
Net return over lbr & mgt	-23.20
Cost of Production	
Total direct expense per bu.	5.37
Total dir & ovhd exp per bu.	7.23
Less govt & other income	7.07
With labor & management	7.72
Net value per unit	7.15
Machinery cost per acre	95.64
Est. labor hours per acre	1.08

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
State Report, 2023
(Farms Sorted By Net Return)

Beef Cow-Calf -- Average Per Cwt. Produced

	<u>Avg. Of All Farms</u>	
Number of farms		13
	Quantity	Value
Beef Calves sold (lb)	50.71	133.24
Transferred out (lb)	56.35	150.15
Cull sales (lb)	0.64	41.81
Insurance income		0.79
Government payments		2.12
Other income		2.10
Purchased (lb)	-0.08	-58.20
Transferred in (lb)	-6.08	-25.28
Inventory change (lb)	-2.49	21.24
Gross margin		267.97
Direct Expenses		
Protein Vit Minerals (lb.)	23.66	7.17
Aftermath Grazing (aum)	0.18	12.74
Corn Silage (lb.)	613.14	10.75
Hay, Alfalfa (lb.)	224.15	12.68
Hay, Grass (lb.)	881.25	32.12
Pasture (aum)	1.71	39.59
DDGS, dry (lb.)	36.64	3.03
Other feed stuffs (lb)	487.74	15.47
Veterinary		7.57
Fuel & oil		7.70
Repairs		13.31
Operating interest		6.13
Miscellaneous		8.00
Total direct expenses		176.26
Return over direct expense		91.70
Overhead Expenses		
Custom hire		1.13
Interest		2.29
Mach & bldg depreciation		11.45
Miscellaneous		18.60
Total overhead expenses		33.47
Total dir & ovhd expenses		209.73
Net return		58.23
Labor & management charge		21.77
Net return over lbr & mgt		36.47
Cost of Production Per Cwt. Produced		
Total direct expense per unit		176.26
Total dir & ovhd expense per unit		209.73
With other revenue adjustments		228.25
With labor and management		250.02
Est. labor hours per unit		1.06
Other Information		
Number of cows		222.9
Pregnancy percentage		94.5
Pregnancy loss percentage		2.4
Culling percentage		14.5
Calving percentage		92.2
Weaning percentage		81.7
Calves sold per cow		0.84
Calf death loss percent		12.7
Cow death loss percent		1.8
Cows per FTE		648.7
Average weaning weight		521
Lb. weaned/exposed female		425
Feed cost per cow		543.52
Avg wgt/ Beef Calves sold		520
Avg price / cwt.		262.75

Livestock Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Beef Cow-Calf -- Average Per Cow

	<u>Avg. Of All Farms</u>	
Number of farms		13
	Quantity	Value
Beef Calves sold (lb)	206.4	542.23
Transferred out (lb)	229.3	611.05
Cull sales (lb)	2.6	170.16
Insurance income		3.23
Government payments		8.62
Other income		8.54
Purchased (lb)	-0.3	-236.86
Transferred in (lb)	-24.7	-102.89
Inventory change (lb)	-10.1	86.43
Gross margin		1,090.50
Direct Expenses		
Protein Vit Minerals (lb.)	96.3	29.17
Aftermath Grazing (aum)	0.7	51.83
Corn Silage (lb.)	2,495.2	43.76
Hay, Alfalfa (lb.)	912.2	51.62
Hay, Grass (lb.)	3,586.3	130.73
Pasture (aum)	7.0	161.11
DDGS, dry (lb.)	149.1	12.35
Other feed stuffs (lb)	1,984.9	62.96
Veterinary		30.80
Fuel & oil		31.32
Repairs		54.16
Operating interest		24.96
Miscellaneous		32.55
Total direct expenses		717.31
Return over direct expense		373.20
Overhead Expenses		
Custom hire		4.58
Hired labor		35.95
Mach & bldg depreciation		46.60
Miscellaneous		49.08
Total overhead expenses		136.21
Total dir & ovhd expenses		853.52
Net return		236.98
Labor & management charge		88.58
Net return over lbr & mgt		148.40
Cost of Production Per Cwt. Produced		
Total direct expense per unit		176.26
Total dir & ovhd expense per unit		209.73
With other revenue adjustments		228.25
With labor and management		250.02
Est. labor hours per unit		4.32
Other Information		
Number of cows		222.9
Pregnancy percentage		94.5
Pregnancy loss percentage		2.4
Culling percentage		14.5
Calving percentage		92.2
Weaning percentage		81.7
Calves sold per cow		0.84
Calf death loss percent		12.7
Cow death loss percent		1.8
Cows per FTE		648.7
Average weaning weight		521
Lb. weaned/exposed female		425
Feed cost per cow		543.52
Avg wgt/ Beef Calves sold		520
Avg price / cwt.		262.75

Livestock Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(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	19	
	Quantity	Value
Beef Calves sold (lb)	39.24	102.71
Transferred out (lb)	27.56	67.54
Cull sales (lb)	12.34	33.00
Government payments		3.76
Other income		0.58
Purchased (lb)	-8.91	-41.34
Transferred in (lb)	-15.47	-34.83
Inventory change (lb)	45.08	106.26
Gross margin		237.67
Direct Expenses		
Protein Vit Minerals (lb.)	80.95	7.77
Complete Ration (lb.)	306.89	10.92
Corn (bu.)	0.62	3.10
Corn Silage (lb.)	590.50	10.29
Hay, Grass (lb.)	1,135.97	37.98
Haylage, Grass (lb.)	58.79	0.91
Pasture (aum)	0.80	25.32
Hay (lb.)	27.35	0.82
Other feed stuffs (lb)	133.48	7.32
Veterinary		5.19
Fuel & oil		5.76
Repairs		9.82
Operating interest		3.26
Miscellaneous		4.42
Total direct expenses		132.88
Return over direct expense		104.80
Overhead Expenses		
Interest		4.51
Mach & bldg depreciation		5.87
Miscellaneous		7.82
Total overhead expenses		18.20
Total dir & ovhd expenses		151.08
Net return		86.60
Labor & management charge		17.28
Net return over lbr & mgt		69.32
Cost of Production Per Cwt. Produced		
Total direct expense per unit		132.88
Total dir & ovhd expense per unit		151.08
With other revenue adjustments		171.04
With labor and management		188.32
Est. labor hours per unit		0.73
Other Information		
Number of cows		143.5
Pregnancy percentage		93.8
Pregnancy loss percentage		3.7
Culling percentage		14.1
Calving percentage		90.3
Weaning percentage		85.8
Calves sold per cow		0.61
Calf death loss percent		7.9
Cow death loss percent		3.0
Cows per FTE		768.0
Average weaning weight		511
Lb. weaned/exposed female		439
Feed cost per cow		523.30
Avg wgt/ Beef Calves sold		533
Avg price / cwt.		261.76

Livestock Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

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

	<u>Avg. Of All Farms</u>	
Number of farms		19
	Quantity	Value
Beef Calves sold (lb)	196.6	514.72
Transferred out (lb)	138.1	338.46
Cull sales (lb)	61.8	165.37
Government payments		18.82
Other income		2.90
Purchased (lb)	-44.6	-207.18
Transferred in (lb)	-77.5	-174.54
Inventory change (lb)	225.9	532.48
Gross margin		1,191.03
Direct Expenses		
Protein Vit Minerals (lb.)	405.7	38.94
Complete Ration (lb.)	1,537.9	54.70
Corn (bu.)	3.1	15.55
Corn Silage (lb.)	2,959.1	51.56
Hay, Grass (lb.)	5,692.6	190.34
Haylage, Grass (lb.)	294.6	4.56
Pasture (aum)	4.0	126.87
Hay (lb.)	137.1	4.11
Other feed stuffs (lb)	668.9	36.67
Veterinary		26.02
Fuel & oil		28.87
Repairs		49.20
Operating interest		16.33
Miscellaneous		22.15
Total direct expenses		665.87
Return over direct expense		525.17
Overhead Expenses		
Interest		22.60
Mach & bldg depreciation		29.43
Miscellaneous		39.17
Total overhead expenses		91.20
Total dir & ovhd expenses		757.07
Net return		433.96
Labor & management charge		86.59
Net return over lbr & mgt		347.37
Cost of Production Per Cwt. Produced		
Total direct expense per unit		132.88
Total dir & ovhd expense per unit		151.08
With other revenue adjustments		171.04
With labor and management		188.32
Est. labor hours per unit		3.65
Other Information		
Number of cows		143.5
Pregnancy percentage		93.8
Pregnancy loss percentage		3.7
Culling percentage		14.1
Calving percentage		90.3
Weaning percentage		85.8
Calves sold per cow		0.61
Calf death loss percent		7.9
Cow death loss percent		3.0
Cows per FTE		768.0
Average weaning weight		511
Lb. weaned/exposed female		439
Feed cost per cow		523.30
Avg wgt/ Beef Calves sold		533
Avg price / cwt.		261.76

Livestock Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Beef Replacement Heifers -- Average Per Head

	<u>Avg. Of All Farms</u>	
Number of farms	8	
	Quantity	Value
Beef Replace sold (hd)	0.63	1,058.57
Transferred out (hd)	0.67	1,112.80
Cull sales (hd)	0.05	49.79
Other income		21.09
Purchased (hd)	0.22	-259.52
Transferred in (hd)	1.07	-1,322.73
Inventory change (hd)	-0.09	296.28
Gross margin		956.29
Direct Expenses		
Protein Vit Minerals (lb.)	122.39	32.57
Corn (bu.)	9.12	39.31
Corn Silage (lb.)	4,538.35	67.29
Hay, Alfalfa (lb.)	1,917.37	75.85
Hay, Grass (lb.)	1,635.57	64.62
Pasture (aum)	0.97	37.72
DDGS, dry (lb.)	221.02	23.19
Hay (lb.)	846.52	27.47
Other feed stuffs (lb)	1,272.72	39.04
Fuel & oil		21.28
Repairs		67.67
Operating interest		28.02
Miscellaneous		16.66
Total direct expenses		540.68
Return over direct expense		415.61
Overhead Expenses		
Custom hire		17.43
Farm insurance		19.52
Utilities		34.09
Interest		14.08
Mach & bldg depreciation		40.72
Miscellaneous		32.64
Total overhead expenses		158.48
Total dir & ovhd expenses		699.16
Net return		257.13
Labor & management charge		104.72
Net return over lbr & mgt		152.41
Cost of Production Per Head Sold/Trans		
Total direct expense per unit		1,344.20
Total dir & ovhd expense per unit		1,465.53
With other revenue adjustments		1,465.53
With labor and management		1,545.71
Est. labor hours per unit		5.54
Other Information		
No. purchased or trans in		76
Number sold or trans out		77
Average number of head		59
Percentage death loss		0.6
Feed cost per average head		407.05
Hired labor per average head		4.29
Feed cost/head sold/trans		311.64
Total cost/head sold/trans		1,545.71
Feed cost per head per day		1.12
Avg. purchase weight		128
Avg. purch price / head		1,171.09
Avg. wgt / Beef Replace sold		475
Avg. sales price / head		1,667.11

Livestock Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Beef Replacement Heifers -- Average Per Head Sold/Trans

	<u>Avg. Of All Farms</u>	
Number of farms	8	
	Quantity	Value
Beef Replace sold (hd)	0.5	810.44
Transferred out (hd)	0.5	851.96
Cull sales (hd)	0.0	38.12
Other income		16.15
Purchased (hd)	0.2	-198.68
Transferred in (hd)	0.8	-1,012.68
Inventory change (hd)	-0.1	226.83
Gross margin		732.13
Direct Expenses		
Midds (lb.)	133.8	12.65
Protein Vit Minerals (lb.)	93.7	24.93
Corn (bu.)	7.0	30.09
Corn Silage (lb.)	3,474.5	51.52
Hay, Alfalfa (lb.)	1,467.9	58.07
Hay, Grass (lb.)	1,252.2	49.47
Pasture (aum)	0.7	28.88
DDGS, dry (lb.)	169.2	17.76
Hay (lb.)	648.1	21.03
Other feed stuffs (lb)	840.6	17.24
Fuel & oil		16.29
Repairs		51.81
Operating interest		21.45
Miscellaneous		12.75
Total direct expenses		413.94
Return over direct expense		318.19
Overhead Expenses		
Custom hire		13.34
Farm insurance		14.94
Utilities		26.10
Mach & bldg depreciation		31.17
Miscellaneous		35.77
Total overhead expenses		121.33
Total dir & ovhd expenses		535.27
Net return		196.86
Labor & management charge		80.17
Net return over lbr & mgt		116.69
Cost of Production Per Head Sold/Trans		
Total direct expense per unit		1,344.20
Total dir & ovhd expense per unit		1,465.53
With other revenue adjustments		1,465.53
With labor and management		1,545.71
Est. labor hours per unit		4.24
Other Information		
No. purchased or trans in		76
Number sold or trans out		77
Average number of head		59
Percentage death loss		0.6
Feed cost per average head		407.05
Hired labor per average head		4.29
Feed cost/head sold/trans		311.64
Total cost/head sold/trans		1,545.71
Feed cost per head per day		1.12
Avg. purchase weight		128
Avg. purch price / head		1,171.09
Avg. wgt / Beef Replace sold		475
Avg. sales price / head		1,667.11

Livestock Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Beef Backgrounding -- Average Per Cwt. Produced

	<u>Avg. Of All Farms</u>	
Number of farms	10	
	Quantity	Value
Backgnd Beef sold (lb)	359.56	727.04
Transferred out (lb)	44.33	84.39
Other income		5.25
Purchased (lb)	-59.60	-131.56
Transferred in (lb)	-391.38	-976.77
Inventory change (lb)	143.96	498.72
Gross margin		207.06
Direct Expenses		
Complete Ration (lb.)	576.20	36.67
Corn (bu.)	1.40	7.76
Corn Silage (lb.)	589.39	10.95
Hay, Alfalfa (lb.)	69.85	3.77
Hay, Grass (lb.)	249.57	8.87
Pasture (aum)	0.23	4.97
Screenings, Heavy (lb.)	55.57	4.59
DDGS, dry (lb.)	121.71	9.55
Other feed stuffs (lb)	390.57	16.18
Fuel & oil		7.27
Repairs		17.91
Operating interest		8.16
Miscellaneous		5.60
Total direct expenses		142.26
Return over direct expense		64.80
Overhead Expenses		
Farm insurance		2.54
Utilities		4.52
Interest		6.23
Mach & bldg depreciation		12.78
Miscellaneous		10.06
Total overhead expenses		36.13
Total dir & ovhd expenses		178.40
Net return		28.67
Labor & management charge		26.43
Net return over lbr & mgt		2.24
Cost of Production Per Cwt. Produced		
Total direct expense per unit		184.86
Total dir & ovhd expense per unit		193.80
With other revenue adjustments		193.80
With labor and management		200.35
Est. labor hours per unit		1.18
Other Information		
No. purchased or trans in		249
Number sold or trans out		175
Percentage death loss		0.7
Avg. daily gain (lb.)		1.37
Lb. of conc / lb. of gain		10.59
Lb. of feed / lb. of gain		17.46
Feed cost per cwt. of gain		103.31
Feed cost per head		157.02
Hired labor per head		4.92
Average purchase weight		497
Avg wgt / Backgnd Beef sold		705
Avg purch price / cwt.		220.75
Avg sales price / cwt.		202.20

Livestock Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2023
(Farms Sorted By Net Return)

Beef Backgrounding -- Average Per Head

	<u>Avg. Of All Farms</u>	
Number of farms	10	
	Quantity	Value
Backgnd Beef sold (lb)	546.5	1,105.01
Transferred out (lb)	67.4	128.26
Other income		7.97
Purchased (lb)	-90.6	-199.96
Transferred in (lb)	-594.8	-1,484.56
Inventory change (lb)	218.8	757.98
Gross margin		314.71
Direct Expenses		
Midds (lb.)	62.6	4.91
Protein Vit Minerals (lb.)	154.8	9.80
Complete Ration (lb.)	875.7	55.74
Corn (bu.)	2.1	11.80
Corn Silage (lb.)	895.8	16.65
Pasture (aum)	0.3	7.55
Screenings, Heavy (lb.)	84.5	6.98
DDGS, dry (lb.)	185.0	14.51
Other feed stuffs (lb)	861.6	29.09
Fuel & oil		11.06
Repairs		27.22
Miscellaneous		20.92
Total direct expenses		216.22
Return over direct expense		98.49
Overhead Expenses		
Hired labor		4.92
Utilities		6.87
Interest		9.46
Mach & bldg depreciation		19.43
Miscellaneous		14.24
Total overhead expenses		54.92
Total dir & ovhd expenses		271.14
Net return		43.57
Labor & management charge		40.17
Net return over lbr & mgt		3.40
Cost of Production Per Cwt. Produced		
Total direct expense per unit		184.86
Total dir& ovhd expense per unit		193.80
With other revenue adjustments		193.80
With labor and management		200.35
Est. labor hours per unit		1.80
Other Information		
No. purchased or trans in		249
Number sold or trans out		175
Percentage death loss		0.7
Avg. daily gain (lb.)		1.37
Lb. of conc / lb. of gain		10.59
Lb. of feed / lb. of gain		17.46
Feed cost per cwt. of gain		103.31
Feed cost per head		157.02
Hired labor per head		4.92
Average purchase weight		497
Avg wgt / Backgnd Beef sold		705
Avg purch price / cwt.		220.75
Avg sales price / cwt.		202.20

Figure 1. Gross Cash Income Per Farm

N.D. Farm Business Management Education Program

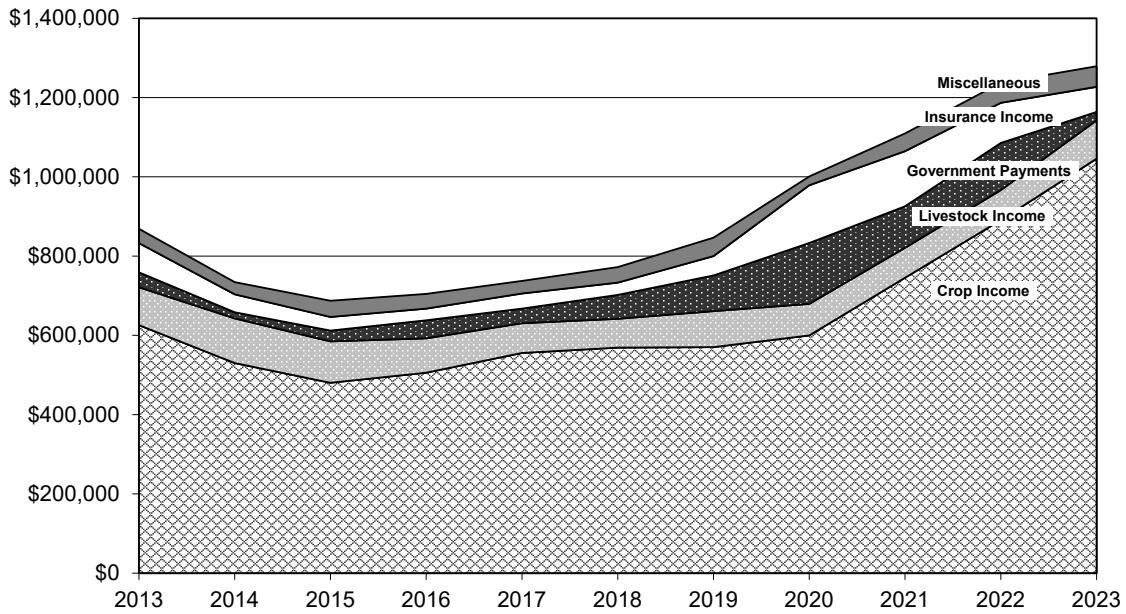


Figure 2. Net Farm Income (Accrual) Per Farm

N.D. Farm Business Management Education Program

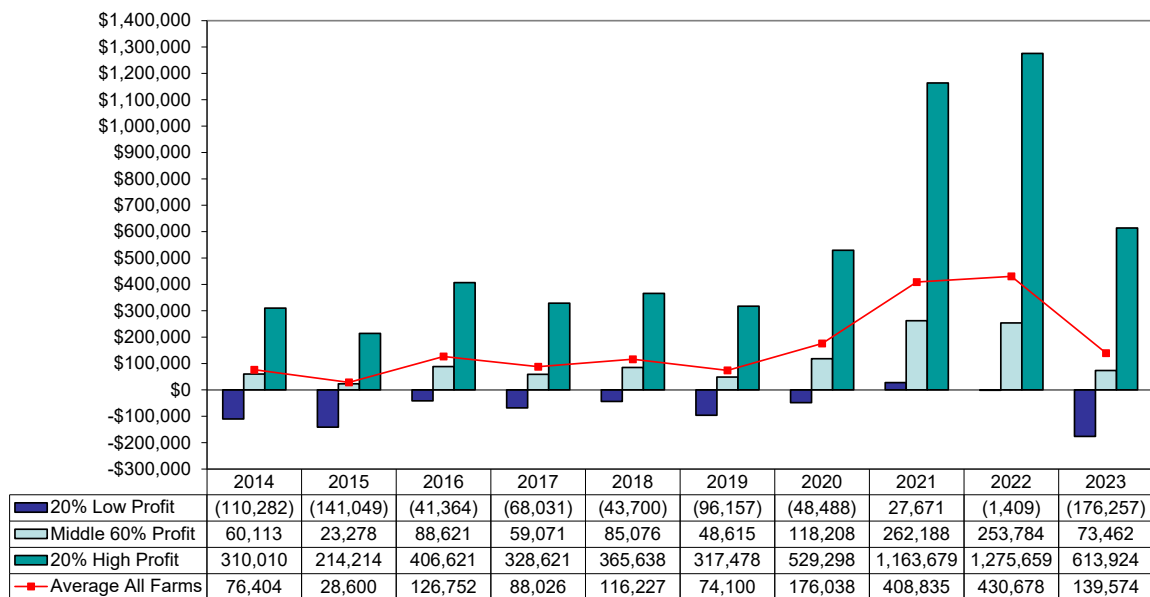


Figure 3. Financial Efficiency Measures (As Percent of Gross Revenue)

N.D. Farm Business Management Education Program

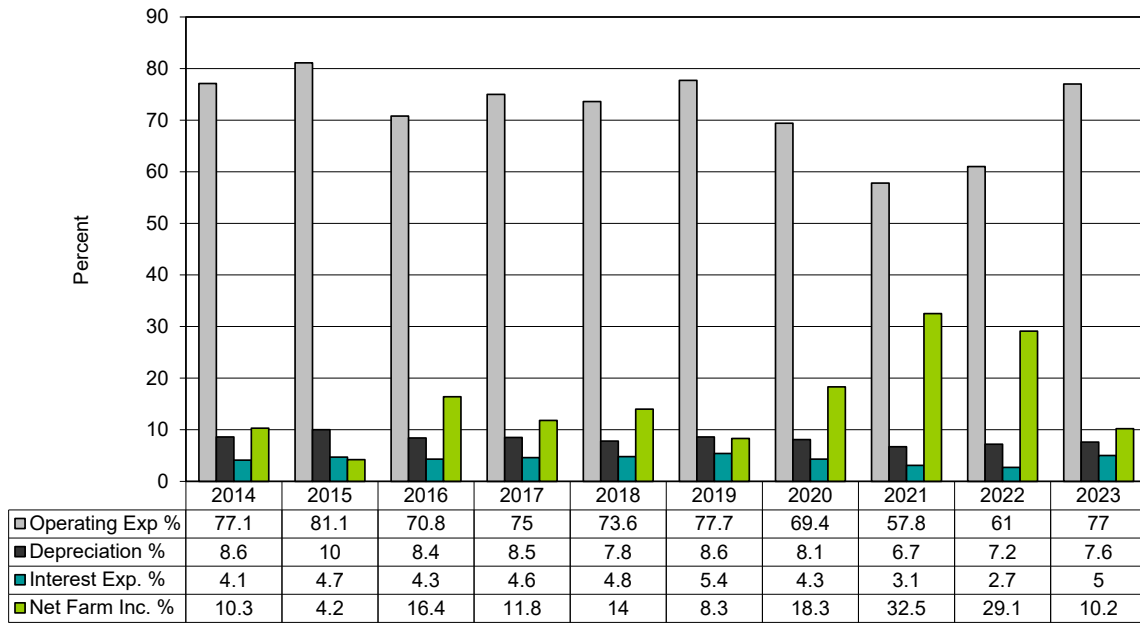


Figure 4. Profitability Measures Per Farm

N.D. Farm Business Management Education Program

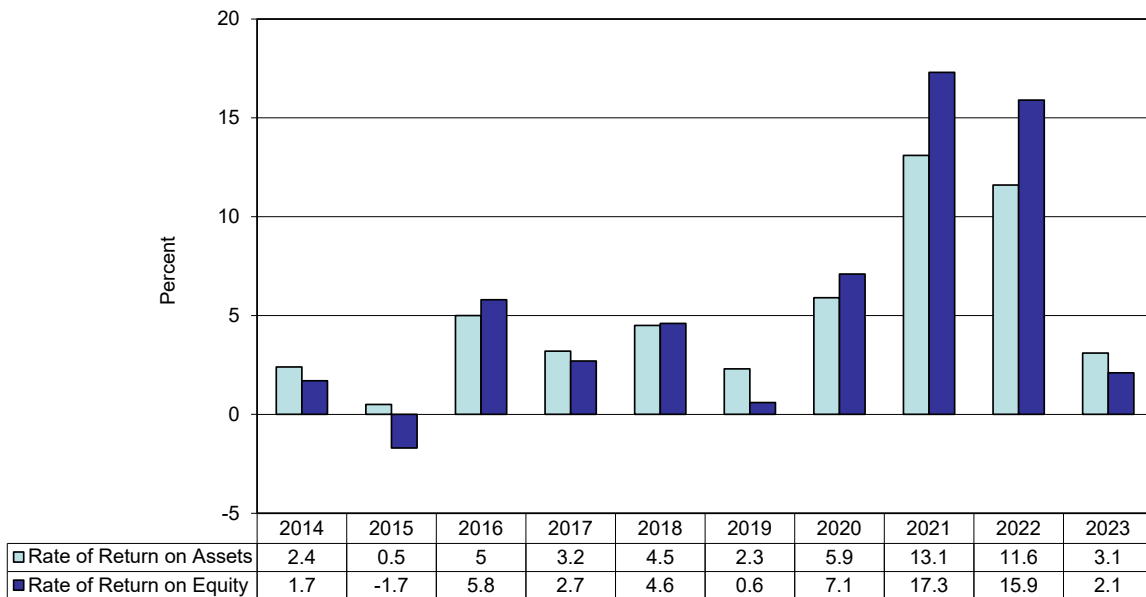


Figure 5. Assets and Liabilities Per Farm, 2023
 N.D. Farm Business Management Education Program

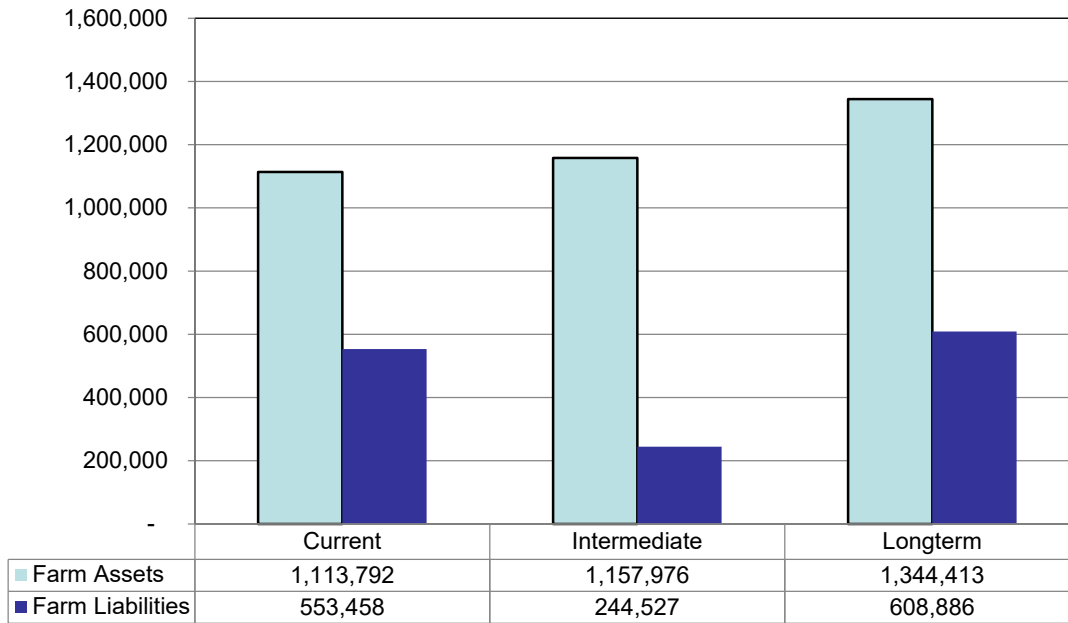


Figure 6. Total Farm Assets and Liabilities
 N.D. Farm Business Management Education Program

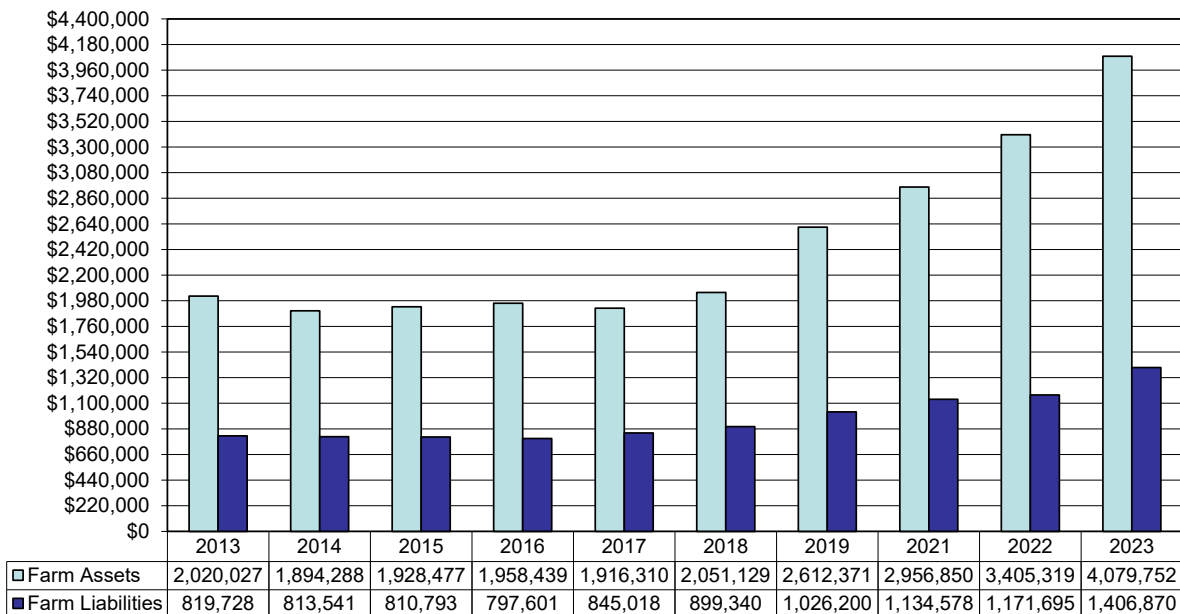


Figure 7. Household and Personal Expenses

N.D. Farm Business Management Education Program

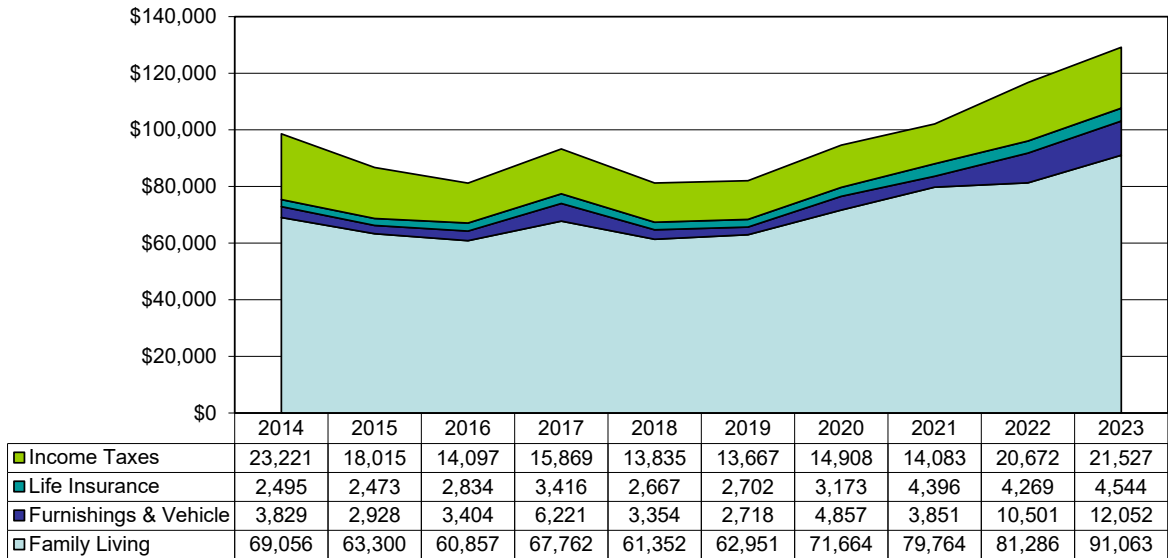


Figure 8. Crop Acreage Per Farm

N.D. Farm Business Management Education Program

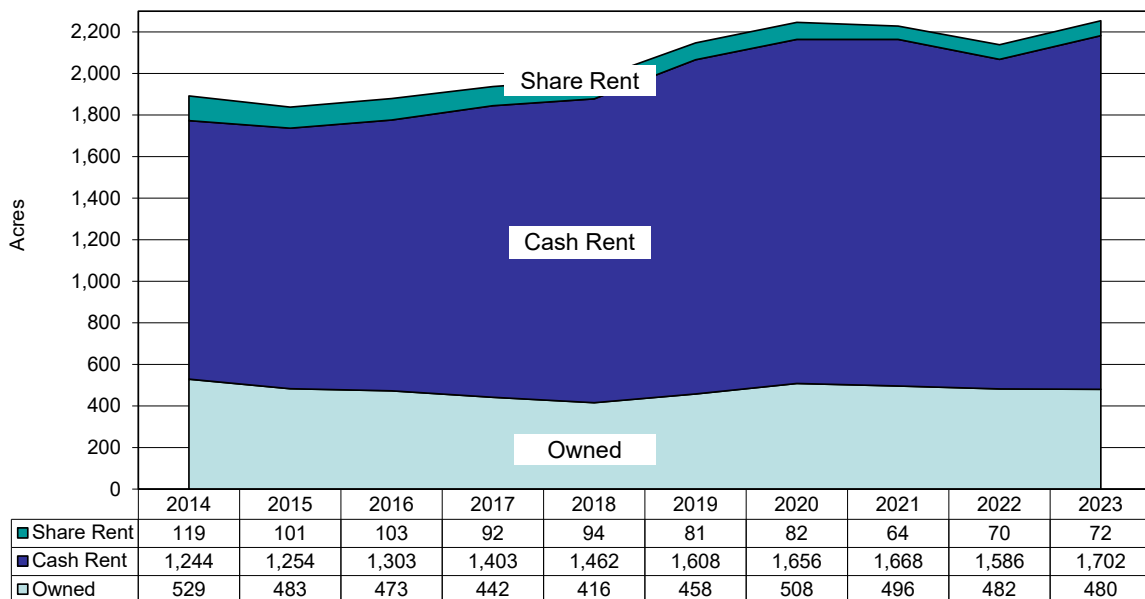


Figure 9. Spring Wheat Costs Per Acre

N.D. Farm Business Management Education Program

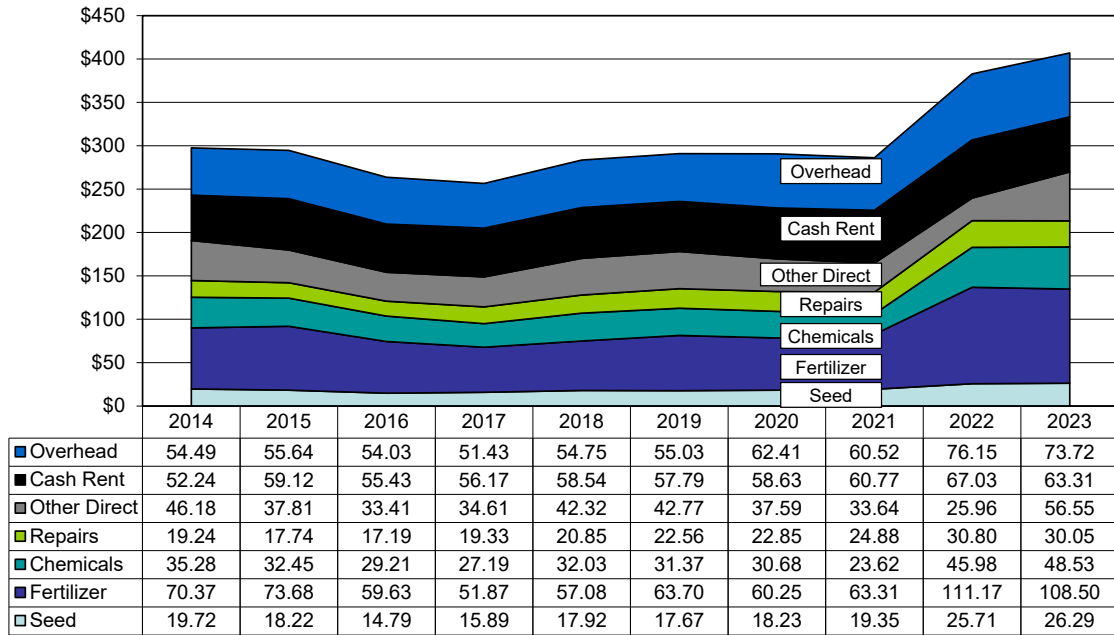
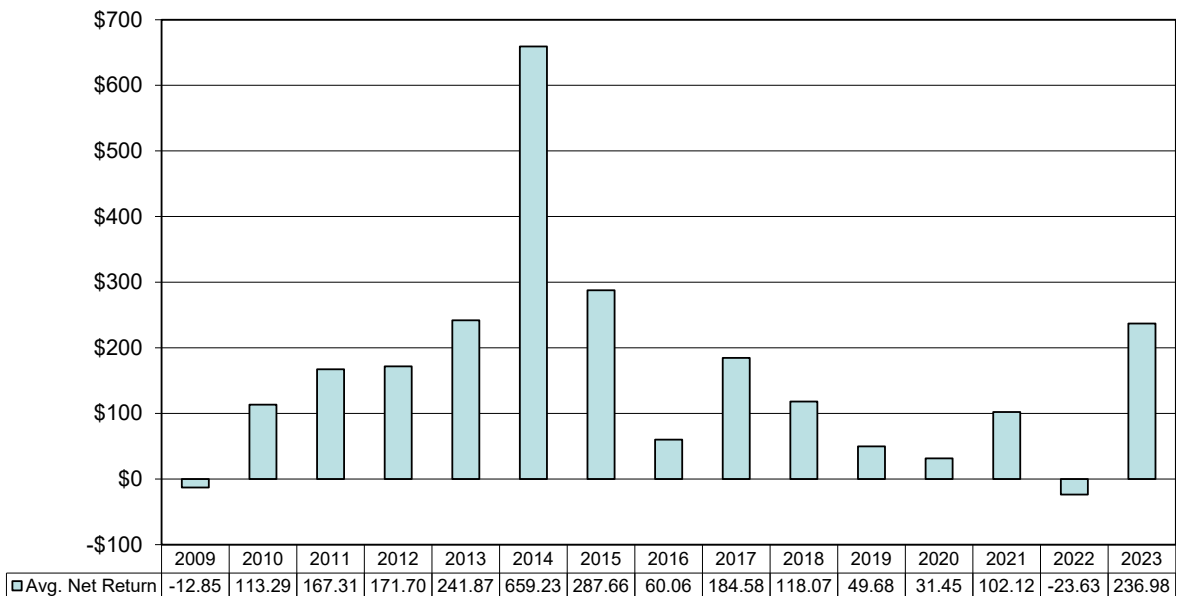


Figure 10. Average Net Return Per Beef Cow

N.D. Farm Business Management Education Program





LEADER IN THE FIELD



Every farm needs a steady hand. The 2024 Ford F-150® Truck is that and more. It's part of America's best-selling trucks for 47 years straight,* Ford F-Series. Plus, its intelligent tech makes hard work easier out in the field. The F-150 is made for the harvest.

Your Local Ford Dealers are Proud
Sponsors of the North Dakota FFA

Based on 1977-2023 CY total sales.