2019 ANNUAL REPORT

State Averages

North Dakota Farm and Ranch Business Management Education

www.ndfarmmanagement.com

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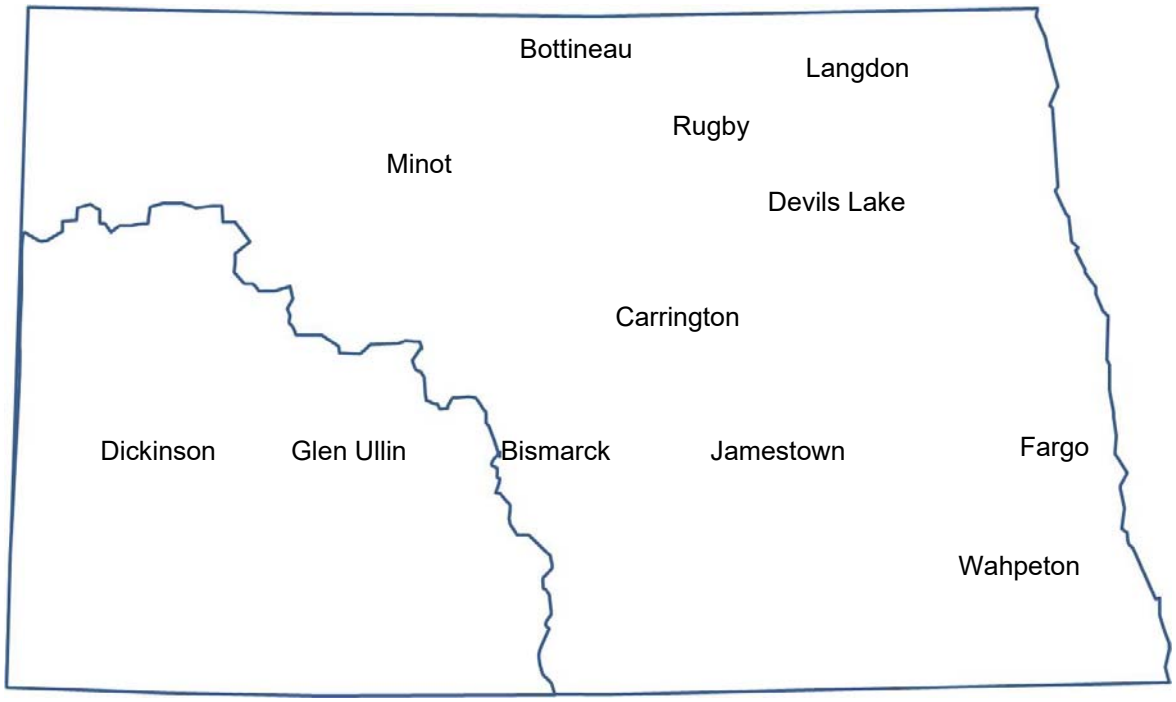
NORTH DAKOTA
FARM BUSINESS MANAGEMENT EDUCATION

2019 ANNUAL REPORT

School	Instructor
Bismarck State College	Kyle Olson
Bismarck State College – Dickinson	Jeff Dragseth
Dakota College at Bottineau	Rodney Armstrong
Dakota College at Bottineau – Minot	Lynsey Aberle
Dakota College at Bottineau – Rugby	Sheila Braaten
Devils Lake State College – Carrington	Joel Lemer Steve Metzger
Fargo (NDSCS)	Kelcey Hoffmann Ron Smithberg
Glen Ullin High School	Ron Egli
Jamestown (NDSCS)	Jason Fewell Virgil Dagman
Lake Region State College – Devils Lake	Darren Wilcox
Lake Region State College – Langdon	Jeremiah Halley
Wahpeton (NDSCS)	Kara Wulfekuhle

This report was made possible by the farm families who cooperated with their farm management instructors in getting the records for 2019 closed out on a timely basis. The farm management instructors cited above generated the Finpack year-end farm analyses. Andrew Swenson, NDSU Extension Service, databased the Finpack analyses of farms and generated the comparative tables for this report.



2019 State Report
North Dakota Farm Business Management Education

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INTRODUCTION

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

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

The 2019 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 31st year that the regional averages have been generated in North Dakota based upon the four regions shown in the state map on the cover of this publication. A regional report has been generated and published for Regions 2 – North Central, 3 – South Central and 4 - Western identified on the North Dakota map. Farms in Region 1 – Red River Valley are located within the Red River Valley. Those farms are contained in a combined Minnesota-North Dakota Red River Valley report. The state averages report includes all farms participating in the North Dakota Farm Business Management Education Program that were represented in the regional averages and also those farms which were processed and submitted after the March deadline date. All of these reports may be ordered from Farm Business Management, P.O. Box 6022, Bismarck, ND, 58506-6022 for $5 per copy. The reports are available online at www.ndfarmmanagement.com.

EXPLANATORY NOTES FOR THE FARM OPERATORS' REPORTS

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

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

Farm Income Statement

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

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

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

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

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

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

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

Inventory Changes

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

Depreciation

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

Profitability Measures

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

"**Rate of return on assets**" is the "Return on farm assets" divided by "Average farm assets."
"**Rate of return on equity** "is the "Return of farm equity" divided by "Average farm equity."
"**Operating profit margin**" is the "Return on farm assets" divided by "Value of farm production."
"**Asset turnover rate**" is the "Value of farm production" divided by "Average farm assets."
"**Farm interest expense**" is the accrual interest cost, usually it will be different from the cash interest expense.
"**Value of operator's labor and management**" is an opportunity cost for unpaid operators labor and management that is used in the calculation of several financial performance measures. A value of $25,000 per full time operator plus 5% of value of farm production is used.
"**Return of farm assets**" is calculated by adding "Farm interest expense" to "Net farm income" and then subtracting the "Value of operator's labor and management."
"**Average farm assets**" is the average of beginning and ending total farm assets.
"**Return on farm equity**" is calculated by subtracting the "Value of operator's labor and management" from "Net farm income."
"**Average farm equity**" is the average of beginning and ending farm net worth.
"**Value of farm production**" is gross cash farm income minus purchased feed and feeder livestock and adjusted for inventory changes in crops, market livestock, accounts receivable and breeding livestock.

Liquidity & Repayment Capacity Measures

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

Balance Sheets

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

Statement of Cash Flows

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

Financial Standards Measures

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

Liquidity

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

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

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

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

Solvency

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

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

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

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

Profitability

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

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

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

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

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

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

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

Repayment Capacity

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

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

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

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

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

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

Efficiency

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

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

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

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

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

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

Crop Production and Marketing Summary

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

Household and Personal Expenses

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

Operator and Labor Information

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

Nonfarm Summary

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

Farm Income Statement
North Dakota Farm Business Management Education Program
State Report, 2019
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	*Low 20%*	*40 - 60%*	*High 20%*
Number of farms	366	73	73	74
Cash Farm Income				
Barley	20,962	11,294	5,023	66,221
Beans, Black Turtle	633	-	1,370	1,779
Beans, Faba	85	176	-	-
Beans, Garbonzo	1,152	4,734	-	325
Beans, Light Red Kidney	115	-	578	-
Beans, Navy	1,650	2,074	-	802
Beans, Pinto	17,830	16,520	10,983	53,335
Buckwheat	79	395	-	-
Canola	30,933	15,696	14,122	71,565
Corn	143,129	120,416	107,139	247,719
Corn Silage	1,351	-	-	-
Hay, Alfalfa	570	71	-	72
Hay, Mixed	1,229	5,924	33	
Hay, Small Grain	640	2,607	224	-
Lentils	431	67	-	2,065
Oats	682	-	1,626	515
Peas, Field	4,644	2,870	7,318	6,647
Potatoes	1,326	6,301	-	-
Rye	460	85	1,351	-
Soybeans	178,029	141,766	123,199	318,055
Sugar Beets	9,228	9,705	5,706	6,122
Sunflowers	12,162	21,996	1,314	28,570
Sunflowers, Confectionary	2,863	2,455	-	4,208
Wheat, Durum	7,727	6,574	-	26,796
Wheat, Spring	122,998	129,620	71,749	258,235
Wheat, Winter	1,157	3,590	-	906
Rented Out	289	642	64	732
Soybeans, Natto	539	-	-	1,528
User Added Crop	346	1,465	-	266
Miscellaneous crop income	6,499	2,444	1,066	8,055
Beef Bulls	1,058	306	22	179
Beef Cow-Calf, Beef Calves	27,754	41,359	28,788	29,194
Beef Replacement Heifers	1,216	386	3,843	1,415
Beef Backgrounding	7,529	9,352	12,525	5,608
Beef Finishing	20,116	99,185	68	1,579
Beef Finish Yearlings	1,628	2,985	1,469	47
Beef Stockers	683	-	-	3,376
Dairy, Milk	23,248	49,675	-	55,339
Dairy, Dairy Calves	445	236	-	1,468
Horses, Breeding Mares, Foals	57	-	281	-
Sheep, Feeder Lamb Prod, Fdr Lambs	39	194	-	-
Bison Cow-Calf, Bison Calves	315	-	-	-
Cull breeding livestock	6,566	8,209	6,499	7,925
Misc. livestock income	98	140	176	36
Crop government payments	16,943	13,808	7,367	38,279
CRP payments	1,222	527	1,044	3,102
Other government payments	68,404	63,903	43,275	127,817
Conservation govt payment	3,450	2,068	2,749	6,466
Custom work income	20,439	61,483	5,973	20,059
Patronage dividends, cash	5,022	6,284	3,853	6,471
Crop insurance income	46,600	64,788	20,072	92,870
Property insurance income	2,776	4,771	2,177	3,956
Sale of resale items	297	-	-	909
Livestock insurance inc	27	14	114	-
Other farm income	20,854	15,734	21,835	23,929
Gross Cash Farm Income	846,523	954,899	514,996	1,534,550

Farm Income Statement (continued)
North Dakota Farm Business Management Education Program
State Report, 2019
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	366	73	73	74
Cash Farm Expense				
Seed and plants	88,356	81,194	52,413	165,957
Fertilizer	102,154	118,338	57,573	187,136
Crop chemicals	64,094	68,580	34,810	123,884
Crop insurance	26,784	33,446	16,148	48,242
Drying expense	3,703	3,534	2,559	6,540
Storage	954	729	295	1,708
Irrigation energy	243	-	296	349
Crop miscellaneous	1,280	1,607	438	1,692
Crop consultants	2,268	1,393	824	4,863
Feeder livestock purchase	11,779	47,513	4,425	6,872
Purchased feed	18,294	41,712	7,375	28,768
Breeding fees	525	1,006	199	917
Veterinary	3,072	7,111	1,848	3,358
Supplies	7,597	31,878	874	2,991
Livestock leases	235	1,018	78	63
Livestock consultants	64	-	-	316
Interest	42,962	67,986	25,329	58,333
Fuel & oil	33,289	43,000	19,664	53,097
Repairs	64,348	85,655	39,546	93,899
Custom hire	17,101	20,711	10,176	25,170
Hired labor	32,449	54,398	15,289	56,187
Land rent	118,371	121,387	67,739	202,009
Stock/quota lease	136	64	-	-
Machinery leases	11,035	14,564	6,074	19,535
Building leases	1,517	3,452	826	2,063
Real estate taxes	5,524	4,769	4,598	8,538
Farm insurance	12,184	15,780	8,408	18,927
Utilities	10,477	12,822	6,284	16,936
Hauling and trucking	775	3,886	-	-
Marketing	1,869	3,382	1,346	2,742
Dues & professional fees	4,527	5,785	2,837	8,188
Purchase of resale items	3,727	2,882	1,194	3,789
Miscellaneous	11,912	10,394	6,128	22,764
Total cash expense	703,605	909,976	395,593	1,175,833
Net cash farm income	142,917	44,923	119,402	358,717
Inventory Changes				
Prepaids and supplies	-2,359	-2,977	-7,691	4,899
Accounts receivable	10,604	20,099	4,956	12,982
Hedging accounts	2,381	3,031	144	6,013
Other current assets	4,934	5,898	243	-382
Crops and feed	3,383	-34,958	-25,690	78,299
Market livestock	-6,418	-41,528	4,166	7,143
Breeding livestock	-3,166	-8,215	-8,100	-615
Other assets	-392	-236	2,484	-5,563
Accounts payable	-4,407	2,065	-1,804	-9,020
Accrued interest	-3,301	-5,344	-1,416	-6,627
Total inventory change	1,260	-62,166	-32,707	87,129
Net operating profit	144,178	-17,243	86,695	445,846
Depreciation				
Machinery and equipment	-59,783	-62,304	-38,348	-116,009
Titled vehicles	-6,694	-6,663	-4,182	-11,042
Buildings and improvements	-6,690	-9,122	-3,907	-14,860
Total depreciation	-73,167	-78,088	-46,437	-141,911
Net farm income from operations	71,010	-95,331	40,258	303,935
Gain or loss on capital sales	3,090	-825	-1,256	13,543
Net farm income	74,100	-96,157	39,002	317,478

Inventory Changes
North Dakota Farm Business Management Education Program
State Report, 2019
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	366	73	73	74
Net cash farm income	142,917	44,923	119,402	358,717
Crops and Feed				
Ending inventory	503,122	407,768	277,932	1,158,636
Beginning inventory	499,739	442,726	303,622	1,080,337
Inventory change	3,383	-34,958	-25,690	78,299
Market Livestock				
Ending inventory	40,183	66,117	42,222	36,937
Beginning inventory	46,601	107,645	38,056	29,793
Inventory change	-6,418	-41,528	4,166	7,143
Accts Receivable				
Ending inventory	67,058	81,819	28,660	126,301
Beginning inventory	56,453	61,720	23,704	113,320
Inventory change	10,604	20,099	4,956	12,982
Prepaid Expenses and Supplies				
Ending inventory	61,352	35,422	31,832	169,770
Beginning inventory	63,711	38,399	39,523	164,871
Inventory change	-2,359	-2,977	-7,691	4,899
Hedging Activities				
Ending inventory	6,701	4,353	3,386	19,297
Withdrawals	5,264	4,488	4,713	13,467
Beginning inventory	5,621	3,808	3,935	16,363
Deposits	3,962	2,001	4,020	10,389
Gain or loss	2,381	3,031	144	6,013
Other Current Assets				
Ending inventory	7,454	10,721	1,424	1,270
Beginning inventory	2,520	4,823	1,180	1,652
Inventory change	4,934	5,898	243	-382
Breeding Livestock				
Ending inventory	80,040	109,861	59,720	97,785
Capital sales	1,187	1,281	1,376	2,001
Beginning inventory	77,501	110,157	55,314	97,446
Capital purchases	6,892	9,200	13,882	2,955
Depreciation, capital adjust	-3,166	-8,215	-8,100	-615
Other Capital Assets				
Ending inventory	120,550	82,612	89,298	242,647
Capital sales	1,971	1,209	5,774	2,139
Beginning inventory	112,507	80,072	91,647	210,253
Capital purchases	10,406	3,985	941	40,096
Depreciation, capital adjust	-392	-236	2,484	-5,563
Accounts Payable				
Beginning inventory	26,803	47,395	10,061	38,627
Ending inventory	31,209	45,330	11,864	47,647
Inventory change	-4,407	2,065	-1,804	-9,020
Accrued Interest				
Beginning inventory	17,887	26,916	10,263	24,396
Ending inventory	21,188	32,261	11,679	31,022
Inventory change	-3,301	-5,344	-1,416	-6,627
Total inventory change	1,260	-62,166	-32,707	87,129
Net operating profit	144,178	-17,243	86,695	445,846

Depreciation
North Dakota Farm Business Management Education Program
State Report, 2019
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	*Low 20%*	*40 - 60%*	*High 20%*
Number of farms	366	73	73	74
Net operating profit	144,178	-17,243	86,695	445,846
Machinery and Equipment				
Ending inventory	626,227	606,586	438,455	1,181,152
Capital sales	22,699	22,830	12,994	60,801
Beginning inventory	615,803	623,064	426,721	1,132,115
Capital purchases	92,906	68,656	63,075	225,847
Depreciation, capital adjust.	-59,783	-62,304	-38,348	-116,009
Titled Vehicles				
Ending inventory	54,824	51,757	37,089	93,029
Capital sales	1,727	1,669	957	2,512
Beginning inventory	53,318	53,600	37,039	87,196
Capital purchases	9,927	6,489	5,188	19,388
Depreciation, capital adjust.	-6,694	-6,663	-4,182	-11,042
Buildings and Improvements				
Ending inventory	204,247	229,650	133,393	410,054
Capital sales	832	2,119	70	1,949
Beginning inventory	197,072	224,758	133,889	393,528
Capital purchases	14,697	16,133	3,481	33,336
Depreciation, capital adjust.	-6,690	-9,122	-3,907	-14,860
Total depreciation, capital adj.	-73,167	-78,088	-46,437	-141,911
Net farm income from operations	71,010	-95,331	40,258	303,935
Gain or loss on capital sales	3,090	-825	-1,256	13,543
Net farm income	74,100	-96,157	39,002	317,478

Profitability Measures
North Dakota Farm Business Management Education Program
State Report, 2019
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	*Low 20%*	*40 - 60%*	*High 20%*
Number of farms	366	73	73	74
Profitability (assets valued at cost)				
Net farm income from operations	71,010	-95,331	40,258	303,935
Rate of return on assets	2.3 %	-3.7 %	1.2 %	5.9 %
Rate of return on equity	0.6 %	-16.0 %	-0.6 %	6.7 %
Operating profit margin	6.6 %	-10.4 %	4.3 %	16.7 %
Asset turnover rate	34.6 %	35.2 %	28.9 %	35.3 %
Farm interest expense	46,262	73,330	26,744	64,960
Value of operator lbr and mgmt.	62,966	61,883	46,571	102,794
Return on farm assets	54,307	-83,884	20,432	266,101
Average farm assets	2,373,670	2,287,496	1,662,490	4,516,704
Return on farm equity	8,045	-157,214	-6,313	201,141
Average farm equity	1,403,253	980,933	1,081,974	3,018,952
Value of farm production	820,674	805,899	480,339	1,593,803

Liquidity & Repayment Capacity Measures
North Dakota Farm Business Management Education Program
State Report, 2019
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	*Low 20%*	*40 - 60%*	*High 20%*
Number of farms	366	73	73	74
Liquidity				
Current ratio	1.59	1.01	2.09	1.97
Working capital	221,878	5,509	193,502	576,711
Working capital to gross inc	30.7%	0.7%	48.2%	42.0%
Current assets	595,318	580,280	370,690	1,171,633
Current liabilities	373,440	574,770	177,189	594,922
Gross revenues (accrual)	722,808	804,908	401,803	1,373,971
Repayment capacity				
Net farm income from operations	71,010	-95,331	40,258	303,935
Depreciation	73,167	78,088	46,437	141,911
Personal income	37,433	38,011	33,712	45,065
Family living/owner withdrawals	-69,107	-73,551	-52,914	-92,189
Cash discrepancy	118	-22	-6	338
Payments on personal debt	-4,701	-4,647	-4,067	-6,067
Income taxes paid	-14,166	-8,768	-11,275	-30,187
Interest on term debt	26,513	33,546	16,302	39,179
Capital debt repayment capacity	120,267	-32,673	68,448	401,984
Scheduled term debt payments	-88,928	-106,610	-55,067	-141,087
Capital debt repayment margin	31,338	-139,284	13,382	260,897
Cash replacement allowance	-41,885	-34,519	-32,643	-81,279
Replacement margin	-10,546	-173,802	-19,261	179,618
Term debt coverage ratio	1.35	-0.31	1.24	2.85
Replacement coverage ratio	0.92	-0.23	0.78	1.81

Balance Sheet at Cost Values
North Dakota Farm Business Management Education Program
State Report, 2019
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	*Low 20%*	*40 - 60%*	*High 20%*
Number of farms	330	65	66	58
Assets				
Current Farm Assets				
Cash and checking balance	52,595	23,298	71,873	74,880
Prepaid expenses & supplies	43,277	33,862	25,512	101,251
Growing crops	4,389	2,286	184	393
Accounts receivable	52,428	71,877	28,274	85,982
Hedging accounts	5,137	4,609	1,376	17,158
Crops held for sale or feed	396,853	371,483	198,010	871,005
Market livestock held for sale	39,134	72,342	44,458	20,912
Other current assets	1,506	524	1,003	52
Total current farm assets	595,318	580,280	370,690	1,171,633
Intermediate Farm Assets				
Breeding livestock	69,097	85,351	62,760	59,188
Machinery and equipment	529,800	577,152	350,436	954,228
Titled vehicles	49,581	49,687	31,776	80,757
Other intermediate assets	48,075	43,095	45,703	77,092
Total intermediate farm assets	696,553	755,286	490,675	1,171,266
Long Term Farm Assets				
Farm land	560,697	552,962	434,098	1,100,885
Buildings and improvements	156,400	192,778	92,966	298,959
Other long-term assets	42,160	28,374	19,199	80,947
Total long-term farm assets	759,257	774,114	546,262	1,480,791
Total Farm Assets	2,051,129	2,109,680	1,407,627	3,823,690
Total Nonfarm Assets	330,250	330,435	250,084	464,201
Total Assets	2,381,379	2,440,115	1,657,712	4,287,890
Liabilities				
Current Farm Liabilities				
Accrued interest	19,248	30,076	8,918	30,200
Accounts payable	24,534	39,371	8,847	38,240
Current notes	270,866	434,450	126,169	428,199
Government crop loans	-	-	-	-
Principal due on term debt	58,791	70,873	33,255	98,283
Total current farm liabilities	373,440	574,770	177,189	594,922
Total intermediate farm liabs	166,639	236,879	82,783	231,523
Total long term farm liabilities	359,261	457,837	216,498	636,468
Total farm liabilities	899,340	1,269,486	476,470	1,462,912
Total nonfarm liabilities	64,501	76,497	49,314	98,280
Total liabilities	963,841	1,345,983	525,783	1,561,192
Net worth (farm and nonfarm)	1,417,537	1,094,132	1,131,928	2,726,698
Net worth change	39,680	-114,663	62,201	216,298
Percent net worth change	3 %	-9 %	6 %	9 %
Ratio Analysis				
Current farm liabilities / assets	63 %	99 %	48 %	51 %
Intermediate farm liab. / assets	24 %	31 %	17 %	20 %
Long term farm liab. / assets	47 %	59 %	40 %	43 %
Total debt to asset ratio	40 %	55 %	32 %	36 %

Statement Of Cash Flows
North Dakota Farm Business Management Education Program
State Report, 2019
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	366	73	73	74
Beginning cash (farm & nonfarm)	71,108	49,902	76,617	97,720
Cash Provided By Operating Activities				
Gross cash farm income	846,523	954,899	514,996	1,534,550
Total cash farm expense	-703,605	-909,976	-395,593	-1,175,833
Net cash from hedging transactions	1,302	2,486	693	3,079
Cash provided by operating	144,219	47,409	120,095	361,795
Cash Provided By Investing Activities				
Sale of breeding livestock	1,062	1,281	1,376	1,555
Sale of machinery & equipment	22,539	21,271	11,704	63,154
Sale of titled vehicles	1,772	1,354	991	2,802
Sale of farm land	6,214	3,342	-	19,723
Sale of farm buildings	847	2,187	70	1,946
Sale of other farm assets	2,185	2,283	5,774	2,139
Sale of nonfarm assets	8,033	4,789	661	5,511
Purchase of breeding livestock	-6,892	-9,200	-13,882	-2,955
Purchase of machinery & equip.	-92,906	-68,656	-63,075	-225,847
Purchase of titled vehicles	-9,927	-6,489	-5,188	-19,388
Purchase of farm land	-58,968	-43,088	-61,874	-148,241
Purchase of farm buildings	-14,697	-16,133	-3,481	-33,336
Purchase of other farm assets	-10,406	-3,985	-941	-40,096
Purchase of nonfarm assets	-19,526	-6,165	-24,598	-21,369
Cash provided by investing	-170,669	-117,207	-152,464	-394,401
Cash Provided By Financing Activities				
Money borrowed	697,779	969,380	389,063	1,184,676
Principal payments	-633,710	-867,862	-347,738	-1,082,617
Personal income	37,433	38,011	33,712	45,065
Family living/owner withdrawals	-69,106	-73,551	-52,911	-92,189
Income and social security tax	-14,753	-8,929	-12,164	-27,488
Capital contributions	343	33	-	1,665
Capital distributions	-1,329	-75	-3,979	-446
Dividends paid	-1	-	-3	-
Cash gifts and inheritances	15,961	4,212	39,604	28,433
Gifts given	-1,395	-1,132	-2,253	-2,660
Other cash flows	-	-	-	-
Cash provided by financing	31,221	60,088	43,331	54,439
Net change in cash balance	4,772	-9,710	10,962	21,833
Ending cash (farm & nonfarm)	75,998	40,170	87,574	119,891
Discrepancy	-118	22	6	-338

Financial Standards Measures
North Dakota Farm Business Management Education Program
State Report, 2019
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	*Low 20%*	*40 - 60%*	*High 20%*
Number of farms	366	73	73	74
Liquidity				
Current ratio	1.59	1.01	2.09	1.97
Working capital	221,878	5,509	193,502	576,711
Working capital to gross inc	30.7%	0.7%	48.2%	42.0%
Solvency (cost)				
Farm debt to asset ratio	44%	60%	34%	38%
Farm equity to asset ratio	56%	40%	66%	62%
Farm debt to equity ratio	0.78	1.51	0.51	0.62
Profitability (cost)				
Rate of return on farm assets	2.3%	-3.7%	1.2%	5.9%
Rate of return on farm equity	0.6%	-16.0%	-0.6%	6.7%
Operating profit margin	6.6%	-10.4%	4.3%	16.7%
Net farm income	74,100	-96,157	39,002	317,478
EBITDA	190,440	56,087	113,439	510,806
Repayment Capacity				
Capital debt repayment capacity	120,267	-32,673	68,448	401,984
Capital debt repayment margin	31,338	-139,284	13,382	260,897
Replacement margin	-10,546	-173,802	-19,261	179,618
Term debt coverage ratio	1.35	-0.31	1.24	2.85
Replacement coverage ratio	0.92	-0.23	0.78	1.81
Efficiency				
Asset turnover rate (cost)	34.6%	35.2%	28.9%	35.3%
Operating expense ratio	77.7%	93.8%	77.0%	68.7%
Depreciation expense ratio	8.6%	8.7%	9.4%	8.7%
Interest expense ratio	5.4%	8.2%	5.4%	4.0%
Net farm income ratio	8.3%	-10.6%	8.2%	18.6%

Crop Production and Marketing Summary
North Dakota Farm Business Management Education Program
State Report, 2019
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	*Low 20%*	*40 - 60%*	*High 20%*
Number of farms	366	73	73	74
Acreage Summary				
Total acres owned	733	641	656	1,175
Total crop acres	2,147	2,387	1,256	3,894
Crop acres owned	458	381	383	813
Crop acres cash rented	1,608	1,927	821	2,921
Crop acres share rented	81	79	52	160
Total pasture acres	426	495	404	478
Percent crop acres owned	21%	16%	30%	21%
Mach invest/crop acre cost	313	280	372	319
Average Price Received (Cash Sales Only)				
Soybeans per bushel	8.02	7.96	7.97	8.11
Wheat, Spring per bushel	4.85	4.60	4.88	5.03
Corn per bushel	3.31	3.28	3.55	3.24
Canola per cwt	14.99	13.62	13.83	15.51
Barley per bushel	4.31	4.03	4.17	4.45
Beans, Pinto per cwt	23.02	23.00	22.67	23.09
Sunflowers per cwt	18.00	18.68	-	18.29
Peas, Field per bushel	6.15	5.07	7.32	6.24
Wheat, Durum per bushel	6.51	-	-	7.15
Flax per bushel	9.88	-	-	9.89
Hay, Grass per ton	46.59	-	-	-
Oats per bushel	2.31	-	-	-
Wheat, Winter per bushel	3.68	-	-	-
Average Yield Per Acre				
Wheat, Spring (bushel)	54.86	48.30	50.28	57.86
Soybeans (bushel)	35.33	32.82	33.88	36.15
Corn (bushel)	148.97	137.79	144.18	153.97
Canola (cwt)	18.78	18.42	18.79	18.60
Barley (bushel)	78.04	67.22	53.59	84.92
Hay, Mixed Alfalfa/Grass (ton)	1.35	1.72	1.22	1.20
Hay, Grass (ton)	1.11	0.883	0.977	1.37
Hay, Small Grain (ton)	2.36	2.91	2.08	2.57
Sunflowers (cwt)	15.72	16.34	-	16.37
Sugar Beets (ton)	18.79	18.72	23.47	14.15
Peas, Field (bushel)	43.62	43.95	-	40.71
Beans, Pinto (cwt)	15.12	13.78	14.70	15.66
Hay, Alfalfa (ton)	2.13	-	-	2.73
Flax (bushel)	23.29	-	-	22.84
Corn Silage (ton)	17.10	-	16.62	-
Wheat, Durum (bushel)	59.43	-	-	60.06
Oats (bushel)	80.08	-	-	-
Beans, Black Turtle (cwt)	16.33	-	-	17.20
Soybeans, Food (bushel)	31.42	-	-	-
Beans, Navy (cwt)	18.80	-	-	-
Hay, Summer Annual Grass (ton)	2.07	-	-	-

Household and Personal Expenses
North Dakota Farm Business Management Education Program
State Report, 2019
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	94	16	22	15
Average family size	2.8	3.0	2.5	2.9
Family Living Expenses				
Food and meals expense	8,752	9,429	7,172	9,112
Medical care	4,563	4,589	3,632	4,306
Health insurance	7,784	8,721	6,255	11,578
Cash donations	2,099	1,884	2,094	4,572
Household supplies	5,865	6,184	5,804	5,944
Clothing	2,202	2,076	1,426	2,960
Personal care	5,018	4,538	4,748	6,706
Child / Dependent care	857	462	1,273	557
Alimony and child support	81	-	307	-
Gifts	1,734	3,056	1,485	2,094
Education	739	1,435	267	771
Recreation	5,148	6,002	5,232	5,257
Utilities (household share)	3,925	4,475	3,053	5,590
Personal vehicle operating exp	3,565	6,172	2,204	2,640
Household real estate taxes	320	239	482	566
Dwelling rent	126	-	5	-
Household repairs	2,021	1,340	1,845	1,790
Personal interest	1,574	2,122	1,896	514
Disability / Long term care ins	236	149	222	450
Life insurance payments	2,702	3,054	2,569	4,782
Personal property insurance	621	1,085	631	674
Miscellaneous	5,721	7,893	4,484	5,588
Total cash family living expense	65,653	74,905	57,076	76,449
Family living from the farm	314	57	913	436
Total family living	65,967	74,962	57,989	76,885
Other Nonfarm Expenditures				
Income taxes	13,667	6,248	18,170	33,145
Furnishing & appliance purchases	45	-	-	-
Nonfarm vehicle purchases	2,673	3,082	1,343	3,082
Nonfarm real estate purchases	3,288	-	3,115	-
Other nonfarm capital purchases	841	-	-369	686
Nonfarm savings & investments	-905	-16,990	1,207	5,915
Total other nonfarm expenditures	19,608	-7,660	23,466	42,828
Total cash family living investment & nonfarm capital purch	85,261	67,245	80,541	119,277

Operator and Labor Information
North Dakota Farm Business Management Education Program
State Report, 2019
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	*Low 20%*	*40 - 60%*	*High 20%*
Number of farms	366	73	73	74
Operator Information				
Average number of operators	1.1	1.1	1.1	1.3
Average age of operators	46.6	49.7	46.9	46.0
Average number of years farming	21.7	24.5	21.4	22.2
Results Per Operator				
Working capital	269,924	12,610	208,303	665,819
Total assets (cost)	2,487,582	2,260,469	1,902,503	3,943,211
Total liabilities	962,724	1,259,221	618,936	1,255,187
Net worth (cost)	1,524,858	1,001,248	1,283,568	2,688,024
Gross farm income	764,640	789,812	461,710	1,233,257
Total farm expense	701,095	873,657	424,032	1,003,755
Net farm income from operations	63,545	-83,846	37,677	229,502
Net nonfarm income	33,497	33,432	31,551	34,028
Family living & tax withdrawals	74,412	72,420	60,080	92,151
Total acres owned	655.6	563.4	614.1	887.4
Total crop acres	1,920.9	2,099.4	1,175.5	2,940.7
Crop acres owned	409.5	335.3	358.3	614.2
Crop acres cash rented	1,438.8	1,695.0	768.7	2,205.6
Crop acres share rented	72.7	69.1	48.5	120.9
Total pasture acres	381.5	435.2	378.0	360.8
Labor Analysis				
Number of farms	366	73	73	74
Total unpaid labor hours	2,065	2,101	1,853	2,617
Total hired labor hours	1,123	2,151	550	1,878
Total labor hours per farm	3,188	4,252	2,403	4,495
Unpaid hours per operator	1,848	1,848	1,735	1,976

Nonfarm Summary
North Dakota Farm Business Management Education Program
State Report, 2019
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	*Low 20%*	*40 - 60%*	*High 20%*
Number of farms	366	73	73	74
Nonfarm Income				
Personal wages & salary	24,943	29,985	25,988	20,670
Net nonfarm business income	4,075	910	1,625	10,261
Personal rental income	1,285	767	1,467	3,719
Personal interest income	568	109	342	1,936
Personal cash dividends	52	13	119	118
Tax refunds	1,431	1,790	923	966
Other nonfarm income	5,079	4,437	3,248	7,396
Total nonfarm income	37,433	38,011	33,712	45,065
Gifts and inheritances	15,961	4,212	39,604	28,433

Financial Summary
North Dakota Farm Business Management Education Program
State Report, 2019
(Farms Sorted By Gross Farm Income)

	Avg. Of All Farms	*Less than 100,000*	*100,001 - 250,000*	*250,001 - 500,000*	*500,001 - 1,000,000*	*1,000,001- 2,000,000*	*Over 2,000,000*
Number of farms	366	30	54	63	125	67	27
Income Statement							
Gross cash farm income	846,523	59,677	182,297	369,547	720,920	1,422,444	3,314,547
Total cash farm expense	703,605	61,241	165,209	312,314	583,399	1,159,570	2,832,194
Net cash farm income	142,917	-1,564	17,088	57,233	137,521	262,873	482,353
Inventory change	1,260	10,706	17,958	3,484	-10,912	-5,322	24,869
Depreciation	-73,167	-6,571	-14,738	-29,142	-66,576	-133,523	-247,486
Net farm income from operations	71,010	2,571	20,309	31,575	60,033	124,028	259,736
Gain or loss on capital sales	3,090	320	4,399	1,556	1,216	4,810	11,532
Average net farm income	74,100	2,891	24,708	33,131	61,249	128,837	271,268
Median net farm income	36,319	3,691	12,510	38,202	48,464	121,077	158,582
Profitability (cost)							
Rate of return on assets	2.3%	-2.8 %	1.0%	0.9%	1.9%	2.6%	3.2%
Rate of return on equity	0.6%	-14.1%	-2.4%	-1.1%	0.0%	1.2%	1.9%
Operating profit margin	6.6%	-11.7%	3.6%	2.9%	5.9%	7.6%	8.2%
Asset turnover rate	34.6%	24.3%	27.0%	32.0%	33.0%	34.4%	39.6%
Liquidity & Repayment (end of year)							
Current assets	595,318	71,885	167,706	322,601	633,848	1,111,868	2,155,433
Current liabilities	373,440	56,662	93,144	170,275	375,309	725,297	1,583,848
Current ratio	1.59	1.27	1.80	1.89	1.69	1.53	1.36
Working capital	221,878	15,223	74,562	152,326	258,539	386,571	571,584
Change in working capital	-22,887	4,705	-8,313	-30,796	-22,256	-60,852	30,708
Working capital to gross inc	30.7%	20.1%	39.3%	41.0%	35.2%	27.7%	19.8%
Term debt coverage ratio	1.35	0.97	0.94	1.09	1.10	1.41	1.92
Replacement coverage ratio	0.92	0.83	0.76	0.74	0.75	0.95	1.24
Term debt to EBITDA	2.81	8.29	5.19	2.98	2.90	2.73	2.26
Solvency (end of year at cost)							
Number of sole proprietors	330	30	52	62	119	52	15
Total assets	2,381,379	419,727	874,561	1,400,620	2,574,814	4,608,764	6,325,926
Total liabilities	963,841	244,904	420,015	467,187	941,680	1,848,282	3,449,562
Net worth	1,417,537	174,823	454,546	933,433	1,633,134	2,760,482	2,876,364
Net worth change	39,680	19,062	14,647	19,278	48,432	46,282	159,697
Farm debt to asset ratio	44%	64%	53%	37%	40%	43%	58%
Total debt to asset ratio	40%	58%	48%	33%	37%	40%	55%
Change in earned net worth %	3%	12%	3%	2%	3%	2%	6%
Nonfarm Information							
Net nonfarm income	37,433	36,288	37,377	39,662	33,310	40,186	45,868
Farms reporting living expenses	94	10	15	18	41	9	1
Total family living expense	65,967	36,320	47,064	64,119	74,081	91,244	-
Crop Acres							
Total crop acres	2,147	270	596	1,102	1,985	3,781	6,462
Total crop acres owned	458	91	177	235	540	682	1,007
Total crop acres cash rented	1,608	146	393	777	1,355	2,987	5,349
Total crop acres share rented	81	34	25	90	90	112	106
Machinery value per crop acre	313	159	221	266	330	325	314

Financial Summary
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	Avg. Of All Farms	*Less Than 31*	*31 - 40*	*41 - 50*	*51 - 60*	*Over 60*
Number of farms	366	51	81	64	87	83
Income Statement						
Gross cash farm income	846,523	425,683	740,006	853,706	1,114,151	922,995
Total cash farm expense	703,605	373,056	653,359	722,737	949,501	683,252
Net cash farm income	142,917	52,628	86,647	130,969	164,650	239,743
Inventory change	1,260	29,978	45,921	8,936	10,893	-75,985
Depreciation	-73,167	-27,702	-51,024	-69,614	-104,009	-93,124
Net farm income from operations	71,010	54,904	81,544	70,292	71,534	70,634
Gain or loss on capital sales	3,090	142	2,447	705	1,750	8,770
Average net farm income	74,100	55,046	83,991	70,997	73,283	79,404
Median net farm income	36,319	26,536	48,684	26,345	23,391	43,701
Profitability (cost)						
Rate of return on assets	2.3%	4.1%	4.3%	2.4%	2.0%	1.3%
Rate of return on equity	0.6%	3.6%	3.9%	0.5%	-0.4%	0.2%
Operating profit margin	6.6%	7.8%	9.7%	6.2%	6.0%	5.0%
Asset turnover rate	34.6%	53.0%	44.9%	38.7%	33.0%	26.1%
Liquidity & Repayment (end of year)						
Current assets	595,318	282,999	523,725	634,398	762,259	676,960
Current liabilities	373,440	192,343	374,708	439,478	523,047	279,717
Current ratio	1.59	1.47	1.40	1.44	1.46	2.42
Working capital	221,878	90,657	149,017	194,920	239,212	397,243
Change in working capital	-22,887	-1,130	1,631	-24,958	-46,557	-38,160
Working capital to gross inc	30.7%	23.0%	19.3%	24.9%	26.7%	61.0%
Term debt coverage ratio	1.35	1.87	1.52	1.33	1.12	1.43
Replacement coverage ratio	0.92	1.60	1.23	0.92	0.77	0.78
Term debt to EBITDA	2.81	2.74	2.80	3.07	3.25	2.09
Solvency (end of year at cost)						
Number of sole proprietors	330	48	80	55	77	70
Total assets	2,381,379	894,376	1,885,712	2,338,406	3,191,944	3,109,655
Total liabilities	963,841	542,764	1,015,425	1,100,767	1,368,168	641,283
Net worth	1,417,537	351,611	870,287	1,237,639	1,823,776	2,468,373
Net worth change	39,680	45,736	79,346	21,164	22,853	23,251
Farm debt to asset ratio	44%	62%	56%	50%	47%	23%
Total debt to asset ratio	40%	61%	54%	47%	43%	21%
Change in earned net worth %	3%	15%	10%	2%	1%	1%
Nonfarm Information						
Net nonfarm income	37,433	39,166	34,507	46,848	29,034	40,765
Farms reporting living expenses	94	12	22	12	20	28
Total family living expense	65,967	49,196	60,042	75,961	67,700	72,290
Crop Acres						
Total crop acres	2,147	1,385	1,789	2,286	2,732	2,242
Total crop acres owned	458	111	244	361	652	751
Total crop acres cash rented	1,608	1,239	1,417	1,873	2,038	1,366
Total crop acres share rented	81	36	129	52	43	125
Machinery value per crop acre	313	154	252	278	345	408

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	Avg. Of All Farms	*Crop*	*Beef*	*Crop and Beef*	*Other*
Number of farms	366	247	30	30	56
Income Statement					
Gross cash farm income	846,523	972,671	184,446	520,405	653,390
Total cash farm expense	703,605	802,412	142,533	446,170	535,049
Net cash farm income	142,917	170,260	41,913	74,236	118,341
Inventory change	1,260	14,243	-21,345	-20,214	-51,392
Depreciation	-73,167	-88,001	-14,355	-39,171	-47,229
Net farm income from operations	71,010	96,502	6,213	14,850	19,720
Gain or loss on capital sales	3,090	3,207	-62	3,499	4,861
Average net farm income	74,100	99,709	6,151	18,349	24,581
Median net farm income	36,319	65,988	1,174	13,188	14,993
Profitability (cost)					
Rate of return on assets	2.3%	2.7%	-0.9%	0.4%	0.8%
Rate of return on equity	0.6%	1.4%	-5.3%	-3.8%	-2.5%
Operating profit margin	6.6%	7.6%	-4.7%	1.5%	2.5%
Asset turnover rate	34.6%	35.6%	18.5%	28.5%	31.3%
Liquidity & Repayment (end of year)					
Current assets	595,318	710,523	160,975	416,658	471,121
Current liabilities	373,440	446,857	110,779	357,786	237,581
Current ratio	1.59	1.59	1.45	1.16	1.98
Working capital	221,878	263,666	50,196	58,872	233,541
Change in working capital	-22,887	-24,197	-14,001	-36,303	-17,971
Working capital to gross inc	30.7%	30.7%	30.4%	11.99%	38.5%
Term debt coverage ratio	1.35	1.52	0.79	0.56	0.91
Replacement coverage ratio	0.92	1.01	0.71	0.46	0.57
Term debt to EBITDA	2.81	2.51	6.91	4.36	3.96
Solvency (end of year at cost)					
Number of sole proprietors	330	216	30	29	54
Total assets	2,381,379	2,775,573	831,856	1,751,089	1,994,946
Total liabilities	963,841	1,124,948	371,685	841,712	711,281
Net worth	1,417,537	1,650,625	460,171	909,376	1,283,665
Net worth change	39,680	52,558	23,537	-14,077	21,233
Farm debt to asset ratio	44%	44%	47%	51%	40%
Total debt to asset ratio	40%	41%	45%	48%	36%
Change in earned net worth %	3%	3%	5%	-2%	2%
Nonfarm Information					
Net nonfarm income	37,433	37,120	32,687	31,024	44,267
Farms reporting living expenses	94	57	11	8	18
Total family living expense	65,967	73,634	36,145	72,023	57,223
Crop Acres					
Total crop acres	2,147	2,573	500	1,875	1,250
Total crop acres owned	458	510	155	479	383
Total crop acres cash rented	1,608	1,956	331	1,328	850
Total crop acres share rented	81	106	14	69	17
Machinery value per crop acre	313	322	213	192	336

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.

Market Facilitation Payments, a 2019 USDA FSA program for commodities directly impacted by retaliatory tariffs, are included under “Other crop income per acre.” “Government payments” are Agricultural Risk Coverage (ARC) and Price Loss Coverage (PLC) payments.

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, 2019
(Farms Sorted By Net Return)

Barley on Owned Land

	Avg. Of All Farms
Number of farms	17
Acres	151.81
Yield per acre (bu.)	65.69
Operators share of yield %	100.00
Value per bu.	4.16
Other product return per acre	8.57
Total product return per acre	282.00
Crop insurance per acre	14.55
Other crop income per acre	24.69
Gross return per acre	321.24
Direct Expenses	
Seed and plants	16.08
Fertilizer	44.44
Crop chemicals	28.52
Crop insurance	13.86
Fuel & oil	12.91
Repairs	21.36
Custom hire	6.35
Machinery leases	0.95
Operating interest	6.55
Miscellaneous	1.80
Total direct expenses per acre	152.83
Return over direct exp per acre	168.41
Overhead Expenses	
Custom hire	1.79
Hired labor	9.84
Machinery leases	2.43
Building leases	1.33
RE & pers. property taxes	8.35
Farm insurance	5.19
Utilities	3.66
Dues & professional fees	0.67
Interest	25.51
Mach & bldg depreciation	28.42
Miscellaneous	4.80
Total overhead expenses per acre	91.98
Total dir & ovhd expenses per acre	244.81
Net return per acre	76.43
Government payments	14.18
Net return with govt pmts	90.60
Labor & management charge	22.95
Net return over lbr & mgt	67.66
Cost of Production	
Total direct expense per bu.	2.33
Total dir & ovhd exp per bu.	3.73
Less govt & other income	2.78
With labor & management	3.13
Net value per unit	4.16
Machinery cost per acre	74.36
Est. labor hours per acre	1.32

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2019
(Farms Sorted By Net Return)

Barley on Cash Rent

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	30	6	6	6
Acres	322.57	122.17	656.58	227.65
Yield per acre (bu.)	78.85	58.39	79.12	93.14
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	4.08	3.76	4.15	4.43
Total product return per acre	322.03	219.32	328.54	412.36
Crop insurance per acre	10.87	-	7.12	-
Other crop income per acre	32.59	37.58	33.32	27.16
Gross return per acre	365.50	256.90	368.98	439.51
Direct Expenses				
Seed and plants	18.54	17.15	19.54	15.62
Fertilizer	48.62	49.64	49.51	49.49
Crop chemicals	34.40	25.25	41.49	26.63
Crop insurance	10.93	7.61	6.99	8.76
Fuel & oil	12.85	14.40	13.41	14.51
Repairs	24.26	30.24	17.75	32.21
Custom hire	8.06	7.80	14.35	1.71
Hired labor	0.58	-	1.43	-
Land rent	60.65	74.54	61.12	57.73
Machinery leases	0.34	-	0.84	-
Operating interest	5.92	7.09	3.41	10.65
Miscellaneous	1.95	0.43	2.48	0.09
Total direct expenses per acre	227.10	234.15	232.31	217.41
Return over direct exp per acre	138.39	22.75	136.66	222.10
Overhead Expenses				
Custom hire	0.26	2.19	-	0.06
Hired labor	9.02	8.31	8.98	15.16
Machinery leases	2.82	0.14	1.19	2.34
Building leases	0.48	0.56	0.02	2.61
Farm insurance	4.46	5.46	4.04	5.19
Utilities	3.82	6.23	3.88	3.09
Dues & professional fees	2.48	2.55	4.46	0.56
Interest	3.64	4.24	1.66	3.53
Mach & bldg depreciation	28.30	33.24	33.42	23.47
Miscellaneous	6.98	7.05	5.43	3.43
Total overhead expenses per acre	62.25	69.98	63.07	59.44
Total dir & ovhd expenses per acre	289.35	304.13	295.39	276.85
Net return per acre	76.14	-47.24	73.59	162.66
Government payments	11.52	8.65	13.44	10.81
Net return with govt pmts	87.66	-38.59	87.03	173.47
Labor & management charge	23.84	23.73	19.89	23.84
Net return over lbr & mgt	63.82	-62.32	67.14	149.63
Cost of Production				
Total direct expense per bu.	2.88	4.01	2.94	2.33
Total dir & ovhd exp per bu.	3.67	5.21	3.73	2.97
Less govt & other income	2.97	4.42	3.05	2.56
With labor & management	3.27	4.82	3.30	2.82
Net value per unit	4.08	3.76	4.15	4.43
Machinery cost per acre	78.38	91.49	79.27	75.26
Est. labor hours per acre	1.10	1.58	0.67	1.56

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

Beans, Pinto on Owned Land

	Avg. Of All Farms
Number of farms	10
Acres	230.91
Yield per acre (cwt.)	14.24
Operators share of yield %	100.00
Value per cwt.	24.90
Total product return per acre	354.52
Crop insurance per acre	54.06
Other crop income per acre	35.46
Gross return per acre	444.03
Direct Expenses	
Seed and plants	56.29
Fertilizer	28.00
Crop chemicals	46.39
Crop insurance	18.08
Fuel & oil	13.50
Repairs	29.51
Custom hire	7.95
Machinery leases	1.73
Operating interest	10.84
Miscellaneous	1.25
Total direct expenses per acre	213.52
Return over direct exp per acre	230.51
Overhead Expenses	
Hired labor	10.64
Machinery leases	6.99
Building leases	1.21
RE & pers. property taxes	7.86
Farm insurance	6.43
Utilities	5.46
Dues & professional fees	2.96
Interest	60.52
Mach & bldg depreciation	35.51
Miscellaneous	3.64
Total overhead expenses per acre	141.22
Total dir & ovhd expenses per acre	354.74
Net return per acre	89.29
Government payments	3.85
Net return with govt pmts	93.14
Labor & management charge	30.30
Net return over lbr & mgt	62.85
Cost of Production	
Total direct expense per cwt.	15.00
Total dir & ovhd exp per cwt.	24.91
Less govt & other income	18.36
With labor & management	20.48
Net value per unit	24.90
Machinery cost per acre	97.18
Est. labor hours per acre	1.30

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

Beans, Pinto on Cash Rent

	Avg. Of All Farms
Number of farms	15
Acres	449.39
Yield per acre (cwt.)	15.57
Operators share of yield %	100.00
Value per cwt.	24.58
Total product return per acre	382.85
Crop insurance per acre	24.50
Other crop income per acre	58.47
Gross return per acre	465.81
Direct Expenses	
Seed and plants	59.72
Fertilizer	53.17
Crop chemicals	46.63
Crop insurance	18.57
Fuel & oil	12.39
Repairs	36.15
Custom hire	3.61
Land rent	71.85
Machinery leases	1.95
Operating interest	17.36
Miscellaneous	1.90
Total direct expenses per acre	323.30
Return over direct exp per acre	142.51
Overhead Expenses	
Hired labor	19.63
Machinery leases	15.19
Building leases	0.52
Farm insurance	4.80
Utilities	4.51
Dues & professional fees	1.63
Interest	6.69
Mach & bldg depreciation	34.54
Miscellaneous	9.67
Total overhead expenses per acre	97.17
Total dir & ovhd expenses per acre	420.47
Net return per acre	45.34
Government payments	4.56
Net return with govt pmts	49.90
Labor & management charge	30.34
Net return over lbr & mgt	19.55
Cost of Production	
Total direct expense per cwt.	20.76
Total dir & ovhd exp per cwt.	27.00
Less govt & other income	21.38
With labor & management	23.33
Net value per unit	24.58
Machinery cost per acre	105.19
Est. labor hours per acre	1.31

Crop Enterprise Analysis
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(Farms Sorted By Net Return)

Canola on Owned Land

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	26	5	5	6
Acres	276.61	187.54	296.69	322.60
Yield per acre (cwt.)	18.05	17.81	20.19	21.17
Operators share of yield %	100.00	100.00	100.00	100.00
Value per cwt.	14.98	14.59	15.05	15.85
Total product return per acre	270.41	259.90	303.89	335.53
Crop insurance per acre	16.17	5.94	-	2.42
Other crop income per acre	26.63	28.24	18.38	32.14
Gross return per acre	313.20	294.08	322.27	370.08
Direct Expenses				
Seed and plants	51.11	59.92	48.64	51.49
Fertilizer	62.17	81.26	66.19	60.34
Crop chemicals	28.65	31.70	26.50	26.72
Crop insurance	11.86	19.30	11.54	10.84
Fuel & oil	11.97	9.91	12.85	12.02
Repairs	20.88	33.63	26.05	12.96
Custom hire	3.91	8.86	1.95	3.41
Hired labor	0.55	1.11	1.97	-
Machinery leases	0.09	0.65	-	-
Operating interest	4.75	10.68	5.06	1.09
Miscellaneous	0.79	1.10	1.13	0.29
Total direct expenses per acre	196.72	258.12	201.86	179.17
Return over direct exp per acre	116.48	35.96	120.41	190.91
Overhead Expenses				
Custom hire	0.42	0.17	0.00	0.68
Hired labor	7.24	12.33	12.88	7.33
Machinery leases	0.78	0.20	-	0.81
Building leases	0.49	0.17	0.81	0.75
RE & pers. property taxes	7.80	9.15	9.14	6.76
Farm insurance	4.86	8.73	5.04	3.67
Utilities	3.41	5.22	3.79	2.70
Dues & professional fees	1.40	1.36	0.87	2.70
Interest	14.44	14.83	24.99	14.85
Mach & bldg depreciation	27.94	45.22	25.65	31.16
Miscellaneous	3.43	3.97	4.64	4.81
Total overhead expenses per acre	72.21	101.36	87.81	76.22
Total dir & ovhd expenses per acre	268.93	359.48	289.66	255.39
Net return per acre	44.27	-65.40	32.61	114.69
Government payments	14.23	16.29	18.41	10.63
Net return with govt pmts	58.51	-49.12	51.02	125.32
Labor & management charge	24.18	26.47	21.39	22.85
Net return over lbr & mgt	34.33	-75.59	29.63	102.47
Cost of Production				
Total direct expense per cwt.	10.90	14.49	10.00	8.46
Total dir & ovhd exp per cwt.	14.90	20.18	14.35	12.06
Less govt & other income	11.74	17.35	12.53	9.93
With labor & management	13.08	18.83	13.58	11.01
Net value per unit	14.98	14.59	15.05	15.85
Machinery cost per acre	65.36	98.13	64.97	58.27
Est. labor hours per acre	1.15	1.52	1.15	0.91

Crop Enterprise Analysis
North Dakota Farm Business Management Education Program
State Report, 2019
(Farms Sorted By Net Return)

Canola on Cash Rent

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	49	9	10	10
Acres	440.79	268.47	301.87	629.14
Yield per acre (cwt.)	17.74	11.28	19.31	21.79
Operators share of yield %	100.00	100.00	100.00	100.00
Value per cwt.	14.95	14.42	14.69	15.13
Total product return per acre	265.33	162.62	283.62	329.68
Hedging gains/losses per acre	0.00	-	-	-
Crop insurance per acre	27.58	73.91	5.89	18.81
Other crop income per acre	28.34	30.44	24.96	25.09
Gross return per acre	321.26	266.98	314.47	373.58
Direct Expenses				
Seed and plants	53.98	62.78	52.16	50.22
Fertilizer	64.51	85.64	64.49	57.93
Crop chemicals	31.37	30.75	29.93	33.15
Crop insurance	13.72	16.51	10.62	15.44
Fuel & oil	11.62	10.59	13.40	11.85
Repairs	23.60	27.35	27.72	24.94
Custom hire	3.72	8.16	4.45	2.32
Hired labor	0.53	-	1.18	-
Land rent	49.37	49.53	51.01	48.03
Operating interest	5.90	8.97	6.13	4.46
Miscellaneous	2.12	2.11	1.42	2.17
Total direct expenses per acre	260.44	302.40	262.50	250.50
Return over direct exp per acre	60.82	-35.42	51.96	123.07
Overhead Expenses				
Custom hire	0.61	0.09	0.41	0.96
Hired labor	6.62	7.66	10.23	7.30
Machinery leases	3.93	6.15	0.72	4.95
Building leases	0.61	0.29	0.88	0.22
Farm insurance	4.06	4.53	4.85	3.70
Utilities	3.20	3.08	2.93	3.65
Dues & professional fees	1.03	1.71	2.14	0.81
Interest	2.66	2.31	2.31	2.53
Mach & bldg depreciation	26.81	36.53	20.47	27.41
Miscellaneous	3.07	3.70	3.28	3.04
Total overhead expenses per acre	52.61	66.06	48.22	54.57
Total dir & ovhd expenses per acre	313.05	368.46	310.72	305.07
Net return per acre	8.20	-101.48	3.74	68.50
Government payments	14.11	17.12	14.57	13.83
Net return with govt pmts	22.32	-84.36	18.31	82.34
Labor & management charge	25.29	22.80	21.07	26.96
Net return over lbr & mgt	-2.97	-107.15	-2.76	55.37
Cost of Production				
Total direct expense per cwt.	14.68	26.82	13.59	11.50
Total dir & ovhd exp per cwt.	17.64	32.67	16.09	14.00
Less govt & other income	13.70	21.90	13.74	11.35
With labor & management	15.12	23.92	14.83	12.59
Net value per unit	14.95	14.42	14.69	15.13
Machinery cost per acre	71.44	88.31	67.43	73.32
Est. labor hours per acre	1.19	1.07	1.35	1.26

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Corn on Owned Land

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	69	13	14	14
Acres	221.45	124.68	259.94	237.57
Yield per acre (bu.)	150.23	109.39	136.31	180.95
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	3.35	3.11	3.22	3.59
Other product return per acre	0.13	-	0.55	-
Total product return per acre	504.00	340.16	440.13	649.55
Hedging gains/losses per acre	3.43	-	-	3.82
Crop insurance per acre	8.78	0.61	19.67	10.31
Other crop income per acre	46.25	42.05	43.64	58.52
Gross return per acre	562.47	382.82	503.44	722.20
Direct Expenses				
Seed and plants	85.29	90.91	80.28	86.01
Fertilizer	108.82	97.71	102.51	124.81
Crop chemicals	23.97	28.35	26.16	19.62
Crop insurance	18.40	16.82	19.26	23.66
Drying expense	16.18	14.04	13.55	24.07
Fuel & oil	21.85	21.59	19.56	24.40
Repairs	40.92	35.77	39.70	38.29
Custom hire	6.16	7.23	6.65	5.20
Hired labor	0.92	-	0.41	0.90
Machinery leases	0.43	0.11	0.12	0.72
Operating interest	17.10	14.41	24.22	15.19
Miscellaneous	0.57	2.46	0.20	-
Total direct expenses per acre	340.62	329.39	332.62	362.86
Return over direct exp per acre	221.85	53.42	170.82	359.34
Overhead Expenses				
Custom hire	0.33	2.05	0.00	0.38
Hired labor	22.53	9.74	22.30	27.15
Machinery leases	6.22	2.42	0.46	15.69
RE & pers. property taxes	16.70	14.27	16.96	18.85
Farm insurance	6.65	6.48	6.54	5.68
Utilities	6.39	6.44	6.47	7.06
Dues & professional fees	3.01	2.10	2.05	4.12
Interest	42.50	51.81	20.30	42.49
Mach & bldg depreciation	47.99	37.06	57.86	46.55
Miscellaneous	4.42	4.74	3.21	7.78
Total overhead expenses per acre	156.75	137.11	136.16	175.74
Total dir & ovhd expenses per acre	497.37	466.50	468.78	538.60
Net return per acre	65.10	-83.68	34.66	183.60
Government payments	4.52	7.27	5.50	1.49
Net return with govt pmts	69.63	-76.41	40.16	185.08
Labor & management charge	45.58	35.93	52.38	42.94
Net return over lbr & mgt	24.05	-112.34	-12.22	142.15
Cost of Production				
Total direct expense per bu.	2.27	3.01	2.44	2.01
Total dir & ovhd exp per bu.	3.31	4.26	3.44	2.98
Less govt & other income	2.89	3.81	2.93	2.57
With labor & management	3.19	4.14	3.31	2.80
Net value per unit	3.38	3.11	3.22	3.61
Machinery cost per acre	123.79	108.07	120.28	130.86
Est. labor hours per acre	1.88	1.71	2.05	1.50

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Corn on Cash Rent

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	109	21	22	22
Acres	558.81	437.01	590.53	706.56
Yield per acre (bu.)	148.62	116.57	149.07	168.02
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	3.33	3.24	3.10	3.47
Other product return per acre	0.03	-	0.15	-
Total product return per acre	495.04	377.76	462.28	583.21
Hedging gains/losses per acre	2.75	-	-0.49	10.92
Crop insurance per acre	7.66	18.59	7.73	2.77
Other crop income per acre	47.11	48.77	43.76	51.18
Gross return per acre	552.56	445.12	513.27	648.08
Direct Expenses				
Seed and plants	81.59	85.07	72.77	81.45
Fertilizer	106.61	100.84	109.58	108.89
Crop chemicals	23.27	23.67	23.01	21.98
Crop insurance	16.54	17.90	16.49	14.82
Drying expense	13.32	11.63	15.63	11.55
Fuel & oil	21.52	22.62	18.64	22.49
Repairs	40.62	50.15	33.92	33.44
Custom hire	4.28	6.75	2.80	4.75
Hired labor	0.88	-	0.16	0.49
Land rent	101.17	113.72	99.98	94.85
Machinery leases	1.28	3.56	0.83	1.63
Operating interest	13.27	14.28	14.51	10.31
Miscellaneous	0.55	0.95	-0.29	0.93
Total direct expenses per acre	424.89	451.13	408.04	407.59
Return over direct exp per acre	127.68	-6.00	105.24	240.49
Overhead Expenses				
Custom hire	0.88	0.64	0.00	0.08
Hired labor	20.61	29.86	13.41	20.09
Machinery leases	9.52	8.91	13.44	4.09
Building leases	0.95	0.50	3.25	0.10
Farm insurance	5.85	7.75	5.00	5.58
Utilities	5.53	7.53	4.84	4.98
Dues & professional fees	3.10	3.35	1.27	4.02
Interest	3.38	5.37	2.51	3.24
Mach & bldg depreciation	42.62	49.85	41.12	41.62
Miscellaneous	6.16	3.32	9.88	4.26
Total overhead expenses per acre	98.59	117.08	94.73	88.06
Total dir & ovhd expenses per acre	523.47	568.20	502.77	495.64
Net return per acre	29.09	-123.08	10.50	152.43
Government payments	4.14	6.40	2.47	4.99
Net return with govt pmts	33.23	-116.68	12.97	157.42
Labor & management charge	37.98	43.43	34.61	35.74
Net return over lbr & mgt	-4.75	-160.11	-21.64	121.68
Cost of Production				
Total direct expense per bu.	2.86	3.87	2.74	2.43
Total dir & ovhd exp per bu.	3.52	4.87	3.37	2.95
Less govt & other income	3.11	4.24	3.01	2.53
With labor & management	3.36	4.61	3.25	2.75
Net value per unit	3.35	3.24	3.10	3.54
Machinery cost per acre	120.18	143.98	106.12	108.09
Est. labor hours per acre	1.70	2.06	1.50	1.41

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Corn on Share Rent

	Avg. Of All Farms
Number of farms	12
Acres	173.82
Yield per acre (bu.)	162.52
Operators share of yield %	65.33
Value per bu.	3.35
Total product return per acre	355.37
Hedging gains/losses per acre	0.76
Crop insurance per acre	4.68
Other crop income per acre	43.84
Gross return per acre	404.65
Direct Expenses	
Seed and plants	71.94
Fertilizer	99.08
Crop chemicals	16.38
Crop insurance	14.23
Drying expense	22.20
Fuel & oil	22.70
Repairs	37.34
Custom hire	7.55
Hired labor	1.12
Operating interest	5.74
Miscellaneous	0.77
Total direct expenses per acre	299.04
Return over direct exp per acre	105.61
Overhead Expenses	
Hired labor	17.91
Machinery leases	1.85
Building leases	0.86
Farm insurance	5.53
Utilities	7.24
Dues & professional fees	3.02
Interest	2.36
Mach & bldg depreciation	47.80
Miscellaneous	6.53
Total overhead expenses per acre	93.10
Total dir & ovhd expenses per acre	392.15
Net return per acre	12.50
Government payments	3.25
Net return with govt pmts	15.76
Labor & management charge	38.51
Net return over lbr & mgt	-22.76
Cost of Production	
Total direct expense per bu.	2.82
Total dir & ovhd exp per bu.	3.69
Less govt & other income	3.20
With labor & management	3.56
Net value per unit	3.35
Machinery cost per acre	114.59
Est. labor hours per acre	1.72

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Corn Silage on Owned Land

	Avg. Of All Farms
Number of farms	11
Acres	77.73
Yield per acre (ton)	14.46
Operators share of yield %	100.00
Value per ton	30.16
Other product return per acre	16.84
Total product return per acre	452.86
Crop insurance per acre	5.72
Other crop income per acre	25.23
Gross return per acre	483.82
Direct Expenses	
Seed and plants	75.02
Fertilizer	59.58
Crop chemicals	16.48
Crop insurance	13.61
Fuel & oil	17.80
Repairs	44.81
Custom hire	76.88
Hired labor	1.33
Operating interest	9.16
Miscellaneous	0.47
Total direct expenses per acre	315.14
Return over direct exp per acre	168.68
Overhead Expenses	
Custom hire	0.88
Hired labor	8.11
Machinery leases	0.86
RE & pers. property taxes	6.05
Farm insurance	3.37
Utilities	3.15
Dues & professional fees	1.46
Interest	14.89
Mach & bldg depreciation	39.21
Miscellaneous	3.06
Total overhead expenses per acre	81.04
Total dir & ovhd expenses per acre	396.18
Net return per acre	87.63
Government payments	5.92
Net return with govt pmts	93.55
Labor & management charge	29.34
Net return over lbr & mgt	64.22
Cost of Production	
Total direct expense per ton	21.80
Total dir & ovhd exp per ton	27.40
Less govt & other income	23.69
With labor & management	25.71
Net value per unit	30.16
Machinery cost per acre	178.98
Est. labor hours per acre	2.85

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Corn Silage on Cash Rent

	Avg. Of All Farms
Number of farms	11
Acres	118.29
Yield per acre (ton)	17.26
Operators share of yield %	100.00
Value per ton	32.89
Total product return per acre	567.63
Crop insurance per acre	0.54
Other crop income per acre	48.72
Gross return per acre	616.89
Direct Expenses	
Seed and plants	83.98
Fertilizer	85.90
Crop chemicals	23.53
Crop insurance	13.64
Fuel & oil	30.40
Repairs	35.80
Custom hire	25.13
Land rent	87.17
Operating interest	14.73
Miscellaneous	0.11
Total direct expenses per acre	400.42
Return over direct exp per acre	216.48
Overhead Expenses	
Hired labor	30.37
Machinery leases	1.64
Building leases	0.17
Farm insurance	5.55
Utilities	4.62
Dues & professional fees	5.02
Interest	4.49
Mach & bldg depreciation	39.45
Miscellaneous	2.20
Total overhead expenses per acre	93.51
Total dir & ovhd expenses per acre	493.93
Net return per acre	122.96
Government payments	4.46
Net return with govt pmts	127.43
Labor & management charge	33.85
Net return over lbr & mgt	93.58
Cost of Production	
Total direct expense per ton	23.20
Total dir & ovhd exp per ton	28.62
Less govt & other income	25.51
With labor & management	27.47
Net value per unit	32.89
Machinery cost per acre	134.60
Est. labor hours per acre	2.26

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CRP on Owned Land

	Avg. Of All Farms	*Low 20%*	*40 - 60%*	*High 20%*
Number of farms	29	5	6	6
Acres	105.00	116.20	136.58	110.58
Gross return per acre	51.36	27.90	48.25	72.36
Direct Expenses				
Crop chemicals	0.35	-	0.19	1.19
Repairs	1.27	0.52	1.75	0.96
Miscellaneous	0.64	0.65	0.51	0.50
Total direct expenses per acre	2.26	1.17	2.45	2.65
Return over direct exp per acre	49.11	26.73	45.80	69.70
Overhead Expenses				
Hired labor	0.52	0.47	0.05	0.28
Machinery leases	0.29	0.07	0.83	0.00
RE & pers. property taxes	8.79	10.55	6.19	12.22
Farm insurance	0.77	0.28	1.37	0.20
Utilities	0.48	0.23	1.18	0.09
Interest	14.85	31.29	6.46	5.24
Mach & bldg depreciation	4.20	1.02	10.30	2.57
Miscellaneous	0.65	0.18	0.32	0.19
Total overhead expenses per acre	30.56	44.09	26.68	20.79
Total dir & ovhd expenses per acre	32.82	45.26	29.13	23.44
Net return per acre	18.55	-17.36	19.12	48.91

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Flax on Cash Rent

	Avg. Of All Farms
Number of farms	10
Acres	239.49
Yield per acre (bu.)	19.37
Operators share of yield %	100.00
Value per bu.	9.94
Total product return per acre	192.55
Crop insurance per acre	63.87
Other crop income per acre	21.72
Gross return per acre	278.14
Direct Expenses	
Seed and plants	15.60
Fertilizer	35.93
Crop chemicals	27.83
Crop insurance	13.76
Fuel & oil	10.88
Repairs	19.74
Custom hire	2.04
Land rent	47.93
Machinery leases	0.16
Operating interest	5.91
Miscellaneous	0.15
Total direct expenses per acre	179.93
Return over direct exp per acre	98.22
Overhead Expenses	
Hired labor	7.10
Machinery leases	2.58
Building leases	0.36
Farm insurance	2.76
Utilities	3.00
Dues & professional fees	1.43
Interest	3.52
Mach & bldg depreciation	24.06
Miscellaneous	5.07
Total overhead expenses per acre	49.89
Total dir & ovhd expenses per acre	229.81
Net return per acre	48.33
Government payments	12.98
Net return with govt pmts	61.31
Labor & management charge	24.48
Net return over lbr & mgt	36.83
Cost of Production	
Total direct expense per bu.	9.29
Total dir & ovhd exp per bu.	11.86
Less govt & other income	6.77
With labor & management	8.04
Net value per unit	9.94
Machinery cost per acre	61.59
Est. labor hours per acre	1.14

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Hay, Alfalfa on Owned Land

	Avg. Of All Farms
Number of farms	12
Acres	103.28
Yield per acre (ton)	1.69
Operators share of yield %	100.00
Value per ton	81.60
Total product return per acre	137.87
Crop insurance per acre	0.37
Other crop income per acre	8.86
Gross return per acre	147.10
Direct Expenses	
Fertilizer	3.46
Crop insurance	0.97
Fuel & oil	7.83
Repairs	14.71
Custom hire	5.59
Operating interest	5.39
Miscellaneous	0.26
Total direct expenses per acre	38.20
Return over direct exp per acre	108.90
Overhead Expenses	
Custom hire	0.69
Hired labor	2.84
Machinery leases	0.85
RE & pers. property taxes	7.75
Farm insurance	3.74
Utilities	2.86
Dues & professional fees	0.96
Interest	14.35
Mach & bldg depreciation	13.06
Miscellaneous	0.69
Total overhead expenses per acre	47.77
Total dir & ovhd expenses per acre	85.97
Net return per acre	61.13
Government payments	2.05
Net return with govt pmts	63.18
Labor & management charge	13.06
Net return over lbr & mgt	50.12
Cost of Production	
Total direct expense per ton	22.61
Total dir & ovhd exp per ton	50.88
Less govt & other income	44.20
With labor & management	51.93
Net value per unit	81.60
Machinery cost per acre	44.55
Est. labor hours per acre	1.05

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Hay, Alfalfa on Cash Rent

	Avg. Of All Farms
Number of farms	14
Acres	105.82
Yield per acre (ton)	2.47
Operators share of yield %	100.00
Value per ton	84.26
Total product return per acre	208.29
Other crop income per acre	12.65
Gross return per acre	220.95
Direct Expenses	
Seed and plants	0.59
Fertilizer	3.03
Crop chemicals	0.62
Crop insurance	1.41
Fuel & oil	10.02
Repairs	22.13
Custom hire	3.37
Hired labor	0.15
Land rent	43.57
Machinery leases	0.34
Operating interest	2.92
Miscellaneous	1.95
Total direct expenses per acre	90.11
Return over direct exp per acre	130.84
Overhead Expenses	
Hired labor	6.06
Machinery leases	0.35
Farm insurance	4.23
Utilities	4.43
Dues & professional fees	2.44
Interest	1.72
Mach & bldg depreciation	28.30
Miscellaneous	3.70
Total overhead expenses per acre	51.23
Total dir & ovhd expenses per acre	141.34
Net return per acre	79.61
Government payments	4.73
Net return with govt pmts	84.34
Labor & management charge	17.47
Net return over lbr & mgt	66.87
Cost of Production	
Total direct expense per ton	36.45
Total dir & ovhd exp per ton	57.18
Less govt & other income	50.15
With labor & management	57.21
Net value per unit	84.26
Machinery cost per acre	61.09
Est. labor hours per acre	0.99

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Hay, Grass on Owned Land

	Avg. Of All Farms
Number of farms	14
Acres	113.46
Yield per acre (ton)	1.13
Operators share of yield %	100.00
Value per ton	48.99
Total product return per acre	55.20
Other crop income per acre	1.19
Gross return per acre	56.39
Direct Expenses	
Seed and plants	0.56
Fertilizer	1.40
Fuel & oil	6.70
Repairs	12.28
Custom hire	0.26
Operating interest	2.58
Miscellaneous	0.53
Total direct expenses per acre	24.32
Return over direct exp per acre	32.07
Overhead Expenses	
Custom hire	0.22
Hired labor	4.06
Machinery leases	0.18
RE & pers. property taxes	2.54
Farm insurance	1.08
Utilities	1.32
Dues & professional fees	0.53
Interest	7.70
Mach & bldg depreciation	10.62
Miscellaneous	2.61
Total overhead expenses per acre	30.86
Total dir & ovhd expenses per acre	55.17
Net return per acre	1.21
Government payments	1.30
Net return with govt pmts	2.51
Labor & management charge	11.72
Net return over lbr & mgt	-9.20
Cost of Production	
Total direct expense per ton	21.58
Total dir & ovhd exp per ton	48.97
Less govt & other income	46.76
With labor & management	57.16
Net value per unit	48.99
Machinery cost per acre	30.25
Est. labor hours per acre	1.22

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Hay, Grass on Cash Rent

	Avg. Of All Farms
Number of farms	20
Acres	314.43
Yield per acre (ton)	1.04
Operators share of yield %	100.00
Value per ton	63.24
Total product return per acre	65.56
Other crop income per acre	1.97
Gross return per acre	67.53
Direct Expenses	
Seed and plants	0.80
Fertilizer	1.84
Fuel & oil	7.42
Repairs	11.38
Custom hire	0.23
Land rent	17.57
Operating interest	3.58
Miscellaneous	0.65
Total direct expenses per acre	43.47
Return over direct exp per acre	24.06
Overhead Expenses	
Hired labor	5.24
Farm insurance	1.22
Utilities	1.08
Dues & professional fees	0.74
Interest	0.95
Mach & bldg depreciation	12.20
Miscellaneous	2.51
Total overhead expenses per acre	23.93
Total dir & ovhd expenses per acre	67.40
Net return per acre	0.14
Government payments	0.78
Net return with govt pmts	0.91
Labor & management charge	10.06
Net return over lbr & mgt	-9.14
Cost of Production	
Total direct expense per ton	41.93
Total dir & ovhd exp per ton	65.01
Less govt & other income	62.36
With labor & management	72.06
Net value per unit	63.24
Machinery cost per acre	31.58
Est. labor hours per acre	0.98

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Hay, Mixed Alfalfa/Grass on Owned Land

	Avg. Of All Farms
Number of farms	18
Acres	160.54
Yield per acre (ton)	1.38
Operators share of yield %	100.00
Value per ton	66.82
Other product return per acre	1.65
Total product return per acre	94.07
Crop insurance per acre	0.07
Other crop income per acre	0.89
Gross return per acre	95.03
Direct Expenses	
Seed and plants	0.93
Fertilizer	2.08
Crop chemicals	0.10
Crop insurance	0.92
Fuel & oil	6.93
Repairs	12.14
Machinery leases	0.24
Operating interest	1.76
Miscellaneous	2.17
Total direct expenses per acre	27.27
Return over direct exp per acre	67.75
Overhead Expenses	
Custom hire	0.14
Hired labor	3.17
Machinery leases	0.26
RE & pers. property taxes	5.81
Farm insurance	3.12
Utilities	1.92
Dues & professional fees	1.31
Interest	16.84
Mach & bldg depreciation	14.41
Miscellaneous	1.87
Total overhead expenses per acre	48.85
Total dir & ovhd expenses per acre	76.12
Net return per acre	18.90
Government payments	2.60
Net return with govt pmts	21.51
Labor & management charge	12.96
Net return over lbr & mgt	8.55
Cost of Production	
Total direct expense per ton	19.72
Total dir & ovhd exp per ton	55.04
Less govt & other income	51.27
With labor & management	60.64
Net value per unit	66.82
Machinery cost per acre	34.20
Est. labor hours per acre	1.01

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Hay, Mixed Alfalfa/Grass on Cash Rent

	Avg. Of All Farms
Number of farms	22
Acres	231.56
Yield per acre (ton)	1.43
Operators share of yield %	100.00
Value per ton	59.37
Total product return per acre	84.66
Other crop income per acre	0.38
Gross return per acre	85.04
Direct Expenses	
Seed and plants	0.73
Fertilizer	0.53
Crop insurance	0.29
Fuel & oil	6.06
Repairs	9.41
Land rent	20.01
Machinery leases	0.23
Operating interest	2.99
Miscellaneous	0.20
Total direct expenses per acre	40.44
Return over direct exp per acre	44.60
Overhead Expenses	
Hired labor	3.91
Farm insurance	2.33
Utilities	2.34
Dues & professional fees	0.83
Interest	3.22
Mach & bldg depreciation	11.55
Miscellaneous	1.92
Total overhead expenses per acre	26.11
Total dir & ovhd expenses per acre	66.55
Net return per acre	18.49
Government payments	0.61
Net return with govt pmts	19.09
Labor & management charge	10.69
Net return over lbr & mgt	8.40
Cost of Production	
Total direct expense per ton	28.36
Total dir & ovhd exp per ton	46.67
Less govt & other income	45.98
With labor & management	53.48
Net value per unit	59.37
Machinery cost per acre	29.57
Est. labor hours per acre	0.69

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Hay, Small Grain on Owned Land

	Avg. Of All Farms
Number of farms	23
Acres	90.59
Yield per acre (ton)	2.07
Operators share of yield %	100.00
Value per ton	59.31
Total product return per acre	122.80
Crop insurance per acre	0.80
Other crop income per acre	19.88
Gross return per acre	143.48
Direct Expenses	
Seed and plants	15.29
Fertilizer	23.25
Crop chemicals	6.50
Crop insurance	0.56
Fuel & oil	10.16
Repairs	16.46
Custom hire	3.16
Operating interest	3.65
Miscellaneous	0.52
Total direct expenses per acre	79.55
Return over direct exp per acre	63.93
Overhead Expenses	
Custom hire	0.75
Hired labor	6.36
Machinery leases	0.74
Building leases	0.34
RE & pers. property taxes	5.34
Farm insurance	4.17
Utilities	2.75
Dues & professional fees	1.29
Interest	15.30
Mach & bldg depreciation	17.73
Miscellaneous	2.82
Total overhead expenses per acre	57.58
Total dir & ovhd expenses per acre	137.14
Net return per acre	6.35
Government payments	6.97
Net return with govt pmts	13.32
Labor & management charge	16.88
Net return over lbr & mgt	-3.56
Cost of Production	
Total direct expense per ton	38.42
Total dir & ovhd exp per ton	66.23
Less govt & other income	52.88
With labor & management	61.03
Net value per unit	59.31
Machinery cost per acre	50.81
Est. labor hours per acre	1.38

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Hay, Small Grain on Cash Rent

	Avg. Of All Farms
Number of farms	17
Acres	87.61
Yield per acre (ton)	2.48
Operators share of yield %	100.00
Value per ton	58.18
Other product return per acre	2.29
Total product return per acre	146.31
Other crop income per acre	12.39
Gross return per acre	158.71
Direct Expenses	
Seed and plants	21.50
Fertilizer	31.69
Crop chemicals	8.71
Crop insurance	0.82
Fuel & oil	8.66
Repairs	16.45
Custom hire	4.29
Land rent	36.32
Operating interest	4.60
Miscellaneous	0.43
Total direct expenses per acre	133.46
Return over direct exp per acre	25.24
Overhead Expenses	
Custom hire	0.70
Hired labor	3.40
Farm insurance	2.78
Utilities	3.20
Dues & professional fees	0.66
Interest	4.06
Mach & bldg depreciation	14.66
Miscellaneous	3.80
Total overhead expenses per acre	33.26
Total dir & ovhd expenses per acre	166.72
Net return per acre	-8.01
Government payments	4.55
Net return with govt pmts	-3.46
Labor & management charge	14.73
Net return over lbr & mgt	-18.19
Cost of Production	
Total direct expense per ton	53.91
Total dir & ovhd exp per ton	67.34
Less govt & other income	59.57
With labor & management	65.52
Net value per unit	58.18
Machinery cost per acre	48.16
Est. labor hours per acre	1.13

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Oats on Owned Land

	Avg. Of All Farms
Number of farms	6
Acres	75.24
Yield per acre (bu.)	70.77
Operators share of yield %	100.00
Value per bu.	2.38
Other product return per acre	8.14
Total product return per acre	176.72
Crop insurance per acre	4.29
Other crop income per acre	36.80
Gross return per acre	217.80
Direct Expenses	
Seed and plants	14.84
Fertilizer	48.39
Crop chemicals	12.92
Crop insurance	10.99
Fuel & oil	20.81
Repairs	22.31
Custom hire	1.10
Operating interest	10.18
Miscellaneous	0.29
Total direct expenses per acre	141.84
Return over direct exp per acre	75.96
Overhead Expenses	
Custom hire	0.83
Hired labor	11.68
Machinery leases	1.80
RE & pers. property taxes	6.92
Farm insurance	6.17
Utilities	2.89
Dues & professional fees	1.39
Interest	29.48
Mach & bldg depreciation	18.24
Miscellaneous	6.48
Total overhead expenses per acre	85.87
Total dir & ovhd expenses per acre	227.71
Net return per acre	-9.91
Government payments	14.02
Net return with govt pmts	4.11
Labor & management charge	21.42
Net return over lbr & mgt	-17.31
Cost of Production	
Total direct expense per bu.	2.00
Total dir & ovhd exp per bu.	3.22
Less govt & other income	2.32
With labor & management	2.63
Net value per unit	2.38
Machinery cost per acre	73.26
Est. labor hours per acre	1.25

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Oats on Cash Rent

	Avg. Of All Farms
Number of farms	6
Acres	157.56
Yield per acre (bu.)	68.44
Operators share of yield %	100.00
Value per bu.	2.46
Other product return per acre	35.54
Total product return per acre	203.66
Crop insurance per acre	1.24
Other crop income per acre	26.70
Gross return per acre	231.59
Direct Expenses	
Seed and plants	12.24
Fertilizer	42.11
Crop chemicals	17.53
Crop insurance	10.76
Fuel & oil	15.01
Repairs	19.17
Custom hire	5.47
Land rent	48.59
Operating interest	11.81
Miscellaneous	1.66
Total direct expenses per acre	184.35
Return over direct exp per acre	47.25
Overhead Expenses	
Hired labor	4.19
Machinery leases	2.06
Building leases	0.90
Farm insurance	3.37
Utilities	2.15
Dues & professional fees	1.07
Interest	8.68
Mach & bldg depreciation	19.55
Miscellaneous	5.94
Total overhead expenses per acre	47.92
Total dir & ovhd expenses per acre	232.26
Net return per acre	-0.67
Government payments	5.43
Net return with govt pmts	4.76
Labor & management charge	22.76
Net return over lbr & mgt	-18.00
Cost of Production	
Total direct expense per bu.	2.69
Total dir & ovhd exp per bu.	3.39
Less govt & other income	2.39
With labor & management	2.72
Net value per unit	2.46
Machinery cost per acre	67.70
Est. labor hours per acre	0.88

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Pasture on Owned Land

	Avg. Of All Farms	*Low 20%*	*40 - 60%*	*High 20%*
Number of farms	46	9	9	10
Acres	723.27	464.21	1,309.46	592.88
Yield per acre (aum)	0.83	0.87	0.61	1.17
Operators share of yield %	100.00	100.00	100.00	100.00
Value per aum	20.05	21.80	16.59	23.55
Total product return per acre	16.68	18.88	10.05	27.51
Crop insurance per acre	0.03	0.00	0.09	-
Other crop income per acre	0.02	0.19	-	-
Gross return per acre	16.74	19.08	10.15	27.51
Direct Expenses				
Repairs	0.63	0.90	0.46	0.71
Custom hire	0.13	0.52	-	-
Miscellaneous	1.17	0.81	0.97	0.69
Total direct expenses per acre	1.94	2.23	1.44	1.40
Return over direct exp per acre	14.80	16.85	8.71	26.11
Overhead Expenses				
RE & pers. property taxes	2.30	4.24	1.17	3.03
Interest	7.01	27.40	2.71	3.68
Mach & bldg depreciation	0.75	0.45	0.67	0.86
Miscellaneous	0.64	0.38	0.60	0.89
Total overhead expenses per acre	10.70	32.47	5.16	8.48
Total dir & ovhd expenses per acre	12.64	34.70	6.60	9.88
Net return per acre	4.10	-15.62	3.55	17.63

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Pasture on Cash Rent

	Avg. Of All Farms	*Low 20%*	*40 - 60%*	*High 20%*
Number of farms	57	11	12	12
Acres	1,084.07	1,323.21	1,122.94	1,133.51
Yield per acre (aum)	0.95	0.71	0.86	1.36
Operators share of yield %	100.00	100.00	100.00	100.00
Value per aum	21.10	19.95	21.57	22.31
Total product return per acre	20.09	14.13	18.51	30.38
Crop insurance per acre	0.02	-	-	0.00
Other crop income per acre	0.05	-	0.23	-
Gross return per acre	20.15	14.13	18.74	30.38
Direct Expenses				
Crop insurance	0.28	0.61	0.58	0.03
Repairs	0.81	0.63	0.54	0.59
Custom hire	0.17	0.16	0.60	-
Land rent	16.36	20.42	16.14	13.10
Miscellaneous	0.92	1.09	1.00	0.50
Total direct expenses per acre	18.53	22.92	18.86	14.21
Return over direct exp per acre	1.62	-8.78	-0.13	16.17
Overhead Expenses				
Mach & bldg depreciation	0.67	0.56	0.82	0.67
Miscellaneous	0.82	1.08	0.65	0.85
Total overhead expenses per acre	1.49	1.64	1.47	1.52
Total dir & ovhd expenses per acre	20.02	24.55	20.33	15.73
Net return per acre	0.13	-10.42	-1.59	14.65

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Peas, Field on Cash Rent

	Avg. Of All Farms
Number of farms	14
Acres	296.00
Yield per acre (bu.)	46.21
Operators share of yield %	100.00
Value per bu.	5.67
Total product return per acre	261.97
Crop insurance per acre	3.97
Other crop income per acre	22.42
Gross return per acre	288.36
Direct Expenses	
Seed and plants	34.35
Fertilizer	6.77
Crop chemicals	36.83
Crop insurance	12.62
Fuel & oil	9.79
Repairs	19.42
Custom hire	3.87
Land rent	50.71
Machinery leases	1.25
Operating interest	5.15
Miscellaneous	4.58
Total direct expenses per acre	185.33
Return over direct exp per acre	103.02
Overhead Expenses	
Custom hire	0.65
Hired labor	7.33
Machinery leases	2.46
Building leases	1.20
Farm insurance	3.44
Utilities	1.87
Dues & professional fees	0.82
Interest	3.50
Mach & bldg depreciation	23.76
Miscellaneous	3.45
Total overhead expenses per acre	48.46
Total dir & ovhd expenses per acre	233.80
Net return per acre	54.56
Government payments	10.84
Net return with govt pmts	65.40
Labor & management charge	19.81
Net return over lbr & mgt	45.59
Cost of Production	
Total direct expense per bu.	4.01
Total dir & ovhd exp per bu.	5.06
Less govt & other income	4.25
With labor & management	4.68
Net value per unit	5.67
Machinery cost per acre	61.03
Est. labor hours per acre	0.85

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Soybeans on Owned Land

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	106	21	21	22
Acres	287.05	285.00	223.98	195.53
Yield per acre (bu.)	34.78	27.82	35.26	42.82
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	8.10	7.91	8.12	8.32
Total product return per acre	281.80	220.03	286.24	356.29
Hedging gains/losses per acre	0.07	0.02	-	-
Crop insurance per acre	21.32	22.01	5.65	37.81
Other crop income per acre	40.86	36.55	40.17	52.23
Gross return per acre	344.05	278.61	332.05	446.33
Direct Expenses				
Seed and plants	59.66	64.60	61.34	60.59
Fertilizer	8.73	11.17	8.27	5.37
Crop chemicals	28.36	27.29	28.18	30.50
Crop insurance	14.24	14.46	12.88	18.24
Fuel & oil	13.47	14.72	13.26	13.62
Repairs	24.24	29.56	23.20	24.95
Custom hire	3.80	2.96	3.62	4.85
Hired labor	0.93	0.63	0.32	-
Machinery leases	0.91	-	-	1.28
Operating interest	8.10	6.86	6.74	4.32
Miscellaneous	1.55	2.67	0.97	0.60
Total direct expenses per acre	164.01	174.92	158.78	164.32
Return over direct exp per acre	180.05	103.69	173.27	282.01
Overhead Expenses				
Custom hire	0.40	0.58	0.69	0.73
Hired labor	8.39	5.33	5.63	12.38
Machinery leases	2.72	3.39	3.33	5.83
Building leases	0.31	0.08	0.36	0.55
RE & pers. property taxes	10.85	8.50	11.27	15.21
Farm insurance	5.65	6.40	5.37	6.78
Utilities	4.36	3.84	4.65	5.29
Dues & professional fees	1.56	1.36	1.72	2.29
Interest	32.17	48.16	28.94	12.60
Mach & bldg depreciation	34.41	36.30	37.71	24.77
Miscellaneous	4.88	5.68	3.19	3.77
Total overhead expenses per acre	105.72	119.63	102.87	90.19
Total dir & ovhd expenses per acre	269.73	294.55	261.64	254.51
Net return per acre	74.33	-15.93	70.41	191.82
Government payments	7.89	8.13	11.73	3.09
Net return with govt pmts	82.22	-7.80	82.14	194.91
Labor & management charge	27.29	27.67	25.84	28.53
Net return over lbr & mgt	54.93	-35.47	56.30	166.38
Cost of Production				
Total direct expense per bu.	4.72	6.29	4.50	3.84
Total dir & ovhd exp per bu.	7.76	10.59	7.42	5.94
Less govt & other income	5.74	8.19	5.79	3.77
With labor & management	6.52	9.18	6.52	4.44
Net value per unit	8.11	7.91	8.12	8.32
Machinery cost per acre	80.06	88.76	81.52	76.20
Est. labor hours per acre	1.19	1.22	1.10	1.37

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Soybeans on Cash Rent

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	169	33	34	34
Acres	685.64	486.47	815.37	589.00
Yield per acre (bu.)	35.04	28.32	32.63	42.14
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	8.15	8.03	8.09	8.43
Other product return per acre	0.05	0.36	-	-
Total product return per acre	285.53	227.85	263.88	355.06
Hedging gains/losses per acre	0.27	0.86	-	0.35
Crop insurance per acre	17.45	28.85	26.53	9.61
Other crop income per acre	40.89	42.60	40.95	42.56
Gross return per acre	344.13	300.15	331.35	407.57
Direct Expenses				
Seed and plants	61.21	65.38	59.72	56.81
Fertilizer	7.81	10.38	6.94	7.68
Crop chemicals	29.24	32.58	28.49	29.25
Crop insurance	13.41	17.00	12.29	13.08
Drying expense	0.21	0.23	0.10	0.55
Fuel & oil	12.36	13.67	11.51	12.97
Repairs	22.76	31.66	19.31	21.19
Custom hire	3.64	6.62	5.17	2.04
Hired labor	0.70	-	2.46	0.12
Land rent	78.55	86.29	81.85	78.94
Machinery leases	0.83	0.53	1.28	0.54
Operating interest	7.21	8.15	7.56	4.97
Miscellaneous	1.61	1.90	1.49	0.52
Total direct expenses per acre	239.52	274.39	238.17	228.66
Return over direct exp per acre	104.61	25.76	93.18	178.91
Overhead Expenses				
Custom hire	0.76	1.84	0.18	0.43
Hired labor	9.95	9.28	9.80	10.14
Machinery leases	3.87	2.17	8.00	1.97
Farm insurance	5.31	6.50	4.45	4.42
Utilities	4.15	5.71	3.88	3.92
Dues & professional fees	2.59	2.38	1.49	3.00
Interest	3.02	4.78	3.26	2.43
Mach & bldg depreciation	30.24	33.20	26.14	28.65
Miscellaneous	4.84	5.35	3.38	4.46
Total overhead expenses per acre	64.73	71.21	60.58	59.41
Total dir & ovhd expenses per acre	304.25	345.60	298.75	288.07
Net return per acre	39.89	-45.45	32.60	119.50
Government payments	7.57	7.63	7.22	6.15
Net return with govt pmts	47.46	-37.83	39.83	125.66
Labor & management charge	24.04	28.67	22.91	24.49
Net return over lbr & mgt	23.42	-66.50	16.91	101.17
Cost of Production				
Total direct expense per bu.	6.84	9.69	7.30	5.43
Total dir & ovhd exp per bu.	8.68	12.20	9.16	6.84
Less govt & other income	6.79	9.37	6.87	5.44
With labor & management	7.48	10.38	7.57	6.03
Net value per unit	8.16	8.06	8.09	8.43
Machinery cost per acre	74.86	92.11	72.49	67.55
Est. labor hours per acre	1.12	1.34	1.12	0.95

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Soybeans on Share Rent

	Avg. Of All Farms
Number of farms	23
Acres	235.81
Yield per acre (bu.)	36.62
Operators share of yield %	69.60
Value per bu.	7.97
Total product return per acre	203.22
Hedging gains/losses per acre	0.52
Crop insurance per acre	9.51
Other crop income per acre	32.17
Gross return per acre	245.42
Direct Expenses	
Seed and plants	57.07
Fertilizer	6.47
Crop chemicals	27.99
Crop insurance	11.55
Fuel & oil	13.03
Repairs	22.49
Custom hire	3.45
Operating interest	3.07
Miscellaneous	1.11
Total direct expenses per acre	146.23
Return over direct exp per acre	99.19
Overhead Expenses	
Custom hire	0.31
Hired labor	6.35
Machinery leases	0.81
Building leases	0.64
Farm insurance	4.85
Utilities	4.56
Dues & professional fees	0.99
Interest	2.53
Mach & bldg depreciation	38.70
Miscellaneous	4.79
Total overhead expenses per acre	64.53
Total dir & ovhd expenses per acre	210.76
Net return per acre	34.66
Government payments	10.19
Net return with govt pmts	44.85
Labor & management charge	23.90
Net return over lbr & mgt	20.95
Cost of Production	
Total direct expense per bu.	5.74
Total dir & ovhd exp per bu.	8.27
Less govt & other income	6.21
With labor & management	7.15
Net value per unit	7.99
Machinery cost per acre	78.78
Est. labor hours per acre	1.02

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Sugar Beets on Owned Land

	Avg. Of All Farms
Number of farms	14
Acres	90.90
Yield per acre (ton)	20.86
Operators share of yield %	100.00
Value per ton	25.76
Total product return per acre	537.31
Crop insurance per acre	130.99
Other crop income per acre	20.88
Gross return per acre	689.18
Direct Expenses	
Seed and plants	203.07
Fertilizer	93.50
Crop chemicals	147.41
Crop insurance	30.24
Fuel & oil	52.42
Repairs	108.75
Custom hire	6.82
Hired labor	14.40
Operating interest	18.56
Miscellaneous	43.28
Total direct expenses per acre	718.44
Return over direct exp per acre	-29.26
Overhead Expenses	
Hired labor	38.35
Machinery leases	8.17
RE & pers. property taxes	22.87
Farm insurance	9.67
Utilities	10.00
Dues & professional fees	2.37
Interest	80.90
Mach & bldg depreciation	75.44
Miscellaneous	10.55
Total overhead expenses per acre	258.31
Total dir & ovhd expenses per acre	976.75
Net return per acre	-287.57
Government payments	-
Net return with govt pmts	-287.57
Labor & management charge	94.96
Net return over lbr & mgt	-382.53
Cost of Production	
Total direct expense per ton	34.44
Total dir & ovhd exp per ton	46.83
Less govt & other income	39.55
With labor & management	44.10
Net value per unit	25.76
Machinery cost per acre	255.37
Est. labor hours per acre	4.10

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Sugar Beets on Cash Rent

	Avg. Of All Farms
Number of farms	19
Acres	235.81
Yield per acre (ton)	17.48
Operators share of yield %	100.00
Value per ton	24.85
Total product return per acre	434.36
Crop insurance per acre	225.97
Other crop income per acre	24.00
Gross return per acre	684.33
Direct Expenses	
Seed and plants	200.28
Fertilizer	84.47
Crop chemicals	141.07
Crop insurance	32.16
Fuel & oil	56.32
Repairs	103.17
Custom hire	10.14
Hired labor	4.71
Land rent	116.72
Stock/quota lease	6.11
Operating interest	29.00
Miscellaneous	56.58
Total direct expenses per acre	840.72
Return over direct exp per acre	-156.39
Overhead Expenses	
Hired labor	46.66
Machinery leases	10.37
RE & pers. property taxes	0.14
Farm insurance	8.40
Utilities	12.58
Dues & professional fees	5.24
Interest	6.61
Mach & bldg depreciation	73.93
Miscellaneous	9.79
Total overhead expenses per acre	173.71
Total dir & ovhd expenses per acre	1,014.44
Net return per acre	-330.11
Government payments	-
Net return with govt pmts	-330.11
Labor & management charge	92.54
Net return over lbr & mgt	-422.64
Cost of Production	
Total direct expense per ton	48.10
Total dir & ovhd exp per ton	58.04
Less govt & other income	43.74
With labor & management	49.03
Net value per unit	24.85
Machinery cost per acre	258.42
Est. labor hours per acre	3.94

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Sunflowers on Owned Land

	Avg. Of All Farms
Number of farms	8
Acres	166.66
Yield per acre (cwt.)	14.66
Operators share of yield %	100.00
Value per cwt.	18.53
Total product return per acre	271.63
Crop insurance per acre	48.50
Other crop income per acre	32.00
Gross return per acre	352.13
Direct Expenses	
Seed and plants	41.47
Fertilizer	49.51
Crop chemicals	33.46
Crop insurance	11.71
Drying expense	0.64
Fuel & oil	10.13
Repairs	18.10
Custom hire	11.36
Operating interest	6.75
Miscellaneous	2.05
Total direct expenses per acre	185.16
Return over direct exp per acre	166.97
Overhead Expenses	
Hired labor	2.78
Machinery leases	0.37
Building leases	0.37
RE & pers. property taxes	7.23
Farm insurance	3.13
Utilities	2.67
Dues & professional fees	0.73
Interest	21.54
Mach & bldg depreciation	36.96
Miscellaneous	4.13
Total overhead expenses per acre	79.91
Total dir & ovhd expenses per acre	265.07
Net return per acre	87.06
Government payments	5.74
Net return with govt pmts	92.80
Labor & management charge	23.34
Net return over lbr & mgt	69.46
Cost of Production	
Total direct expense per cwt.	12.63
Total dir & ovhd exp per cwt.	18.08
Less govt & other income	12.20
With labor & management	13.79
Net value per unit	18.53
Machinery cost per acre	77.80
Est. labor hours per acre	1.10

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Sunflowers on Cash Rent

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	25	5	5	5
Acres	495.60	324.48	830.19	316.25
Yield per acre (cwt.)	15.85	11.81	13.95	24.01
Operators share of yield %	100.00	100.00	100.00	100.00
Value per cwt.	18.27	18.71	18.50	18.35
Total product return per acre	289.46	221.00	258.14	440.67
Crop insurance per acre	17.86	26.16	43.05	-
Other crop income per acre	25.57	32.79	24.87	27.73
Gross return per acre	332.89	279.95	326.06	468.41
Direct Expenses				
Seed and plants	41.62	31.95	43.04	41.68
Fertilizer	41.81	48.99	44.04	46.06
Crop chemicals	34.02	33.96	29.81	44.14
Crop insurance	10.63	12.85	9.49	10.77
Drying expense	0.29	-	-	1.39
Fuel & oil	13.38	14.03	13.84	18.03
Repairs	22.67	25.61	26.21	26.33
Custom hire	11.40	6.25	10.16	2.12
Hired labor	3.21	21.22	-	-
Land rent	55.82	82.76	51.29	53.52
Machinery leases	1.25	4.52	0.02	-
Operating interest	7.53	4.76	11.29	10.61
Miscellaneous	0.92	0.02	1.44	-
Total direct expenses per acre	244.54	286.91	240.62	254.65
Return over direct exp per acre	88.36	-6.96	85.44	213.76
Overhead Expenses				
Custom hire	2.33	0.00	6.38	-
Hired labor	5.29	2.45	5.94	11.60
Machinery leases	1.28	0.96	2.96	0.00
Farm insurance	3.77	2.99	2.14	6.45
Utilities	3.62	4.28	2.89	4.52
Dues & professional fees	1.61	0.97	0.70	6.14
Interest	3.57	3.41	4.27	5.68
Mach & bldg depreciation	25.13	30.92	20.55	34.54
Miscellaneous	4.48	3.75	5.13	5.11
Total overhead expenses per acre	51.06	49.72	50.96	74.05
Total dir & ovhd expenses per acre	295.60	336.63	291.58	328.70
Net return per acre	37.29	-56.68	34.47	139.71
Government payments	6.46	3.02	7.09	3.77
Net return with govt pmts	43.76	-53.66	41.57	143.48
Labor & management charge	22.60	24.22	21.21	33.63
Net return over lbr & mgt	21.16	-77.88	20.35	109.85
Cost of Production				
Total direct expense per cwt.	15.43	24.29	17.24	10.61
Total dir & ovhd exp per cwt.	18.65	28.50	20.90	13.69
Less govt & other income	15.51	23.25	15.52	12.38
With labor & management	16.93	25.30	17.04	13.78
Net value per unit	18.27	18.71	18.50	18.35
Machinery cost per acre	79.06	83.26	83.49	82.95
Est. labor hours per acre	1.12	2.08	0.90	1.75

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Wheat, Durum on Cash Rent

	Avg. Of All Farms
Number of farms	8
Acres	432.47
Yield per acre (bu.)	58.83
Operators share of yield %	100.00
Value per bu.	6.18
Other product return per acre	2.94
Total product return per acre	366.62
Crop insurance per acre	22.72
Other crop income per acre	36.86
Gross return per acre	426.20
Direct Expenses	
Seed and plants	20.68
Fertilizer	71.15
Crop chemicals	38.82
Crop insurance	13.49
Drying expense	2.67
Fuel & oil	12.01
Repairs	22.84
Custom hire	3.06
Land rent	52.58
Machinery leases	0.74
Operating interest	7.04
Miscellaneous	0.72
Total direct expenses per acre	245.80
Return over direct exp per acre	180.40
Overhead Expenses	
Hired labor	9.52
Building leases	0.55
Farm insurance	4.22
Utilities	3.34
Dues & professional fees	2.11
Interest	5.41
Mach & bldg depreciation	35.02
Miscellaneous	4.29
Total overhead expenses per acre	64.46
Total dir & ovhd expenses per acre	310.26
Net return per acre	115.94
Government payments	7.48
Net return with govt pmts	123.42
Labor & management charge	23.36
Net return over lbr & mgt	100.06
Cost of Production	
Total direct expense per bu.	4.18
Total dir & ovhd exp per bu.	5.27
Less govt & other income	4.08
With labor & management	4.48
Net value per unit	6.18
Machinery cost per acre	75.41
Est. labor hours per acre	0.99

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Wheat, Spring on Owned Land

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	95	19	19	19
Acres	365.88	327.29	334.10	478.01
Yield per acre (bu.)	52.43	43.68	49.29	61.63
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	4.92	4.70	5.01	5.10
Other product return per acre	1.46	3.12	0.39	0.48
Total product return per acre	259.66	208.50	247.38	314.62
Hedging gains/losses per acre	0.75	-	-	0.55
Crop insurance per acre	26.15	51.39	21.36	26.24
Other crop income per acre	29.95	29.29	36.72	31.48
Gross return per acre	316.51	289.18	305.47	372.90
Direct Expenses				
Seed and plants	16.42	24.10	18.17	13.57
Fertilizer	61.49	70.22	61.75	58.06
Crop chemicals	29.58	32.93	23.84	29.88
Crop insurance	14.08	15.63	14.93	13.42
Drying expense	0.37	0.92	-	0.44
Fuel & oil	11.39	13.56	9.33	11.38
Repairs	20.62	30.29	18.00	15.71
Custom hire	4.16	6.56	4.56	0.99
Hired labor	0.59	1.21	-	0.33
Operating interest	5.88	9.87	6.19	5.06
Miscellaneous	2.17	3.21	1.10	1.20
Total direct expenses per acre	166.76	208.49	157.87	150.04
Return over direct exp per acre	149.75	80.69	147.60	222.86
Overhead Expenses				
Custom hire	0.59	1.17	0.48	0.12
Hired labor	7.18	7.08	7.34	5.87
Machinery leases	1.22	0.90	3.02	0.77
Building leases	0.38	0.13	0.21	0.84
RE & pers. property taxes	8.25	9.57	8.59	6.95
Farm insurance	5.19	5.54	6.35	4.81
Utilities	3.73	4.38	3.99	4.07
Dues & professional fees	1.29	1.45	0.91	2.03
Interest	24.29	36.33	34.04	20.55
Mach & bldg depreciation	36.43	39.48	35.41	37.62
Miscellaneous	5.04	7.27	3.92	5.03
Total overhead expenses per acre	93.58	113.30	104.26	88.66
Total dir & ovhd expenses per acre	260.34	321.79	262.12	238.70
Net return per acre	56.17	-32.61	43.35	134.19
Government payments	12.60	14.52	9.70	12.07
Net return with govt pmts	68.77	-18.09	53.05	146.26
Labor & management charge	23.96	29.72	23.86	22.83
Net return over lbr & mgt	44.81	-47.81	29.18	123.43
Cost of Production				
Total direct expense per bu.	3.18	4.77	3.20	2.43
Total dir & ovhd exp per bu.	4.97	7.37	5.32	3.87
Less govt & other income	3.61	5.12	3.94	2.72
With labor & management	4.07	5.80	4.42	3.09
Net value per unit	4.94	4.70	5.01	5.11
Machinery cost per acre	74.14	90.78	71.25	64.99
Est. labor hours per acre	1.09	1.18	1.23	0.91

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Wheat, Spring on Cash Rent

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	145	29	29	29
Acres	719.20	462.10	797.87	1,028.28
Yield per acre (bu.)	53.10	42.83	55.01	63.25
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	4.90	4.55	4.86	5.12
Other product return per acre	0.44	0.74	-	-
Total product return per acre	260.54	195.80	267.21	323.91
Hedging gains/losses per acre	0.78	1.26	-	2.16
Crop insurance per acre	30.46	47.86	20.94	24.66
Other crop income per acre	31.67	39.01	25.78	31.41
Gross return per acre	323.44	283.93	313.93	382.13
Direct Expenses				
Seed and plants	17.67	22.82	17.44	17.06
Fertilizer	63.70	79.98	64.05	62.07
Crop chemicals	31.37	33.34	31.45	30.29
Crop insurance	13.93	16.22	14.25	12.95
Drying expense	0.36	1.17	0.11	0.32
Fuel & oil	11.21	11.63	11.83	11.51
Repairs	22.56	33.17	24.16	18.13
Custom hire	6.11	7.94	4.42	3.71
Hired labor	1.72	-	4.86	0.74
Land rent	57.79	74.30	56.41	54.74
Machinery leases	0.97	0.06	1.86	1.03
Operating interest	6.59	10.21	7.45	5.46
Miscellaneous	1.89	1.97	0.72	2.67
Total direct expenses per acre	235.86	292.79	239.01	220.69
Return over direct exp per acre	87.58	-8.86	74.91	161.45
Overhead Expenses				
Custom hire	0.69	2.98	0.05	0.11
Hired labor	6.98	10.80	8.37	7.66
Machinery leases	2.90	4.36	4.76	1.60
Building leases	0.49	0.21	0.20	0.99
Farm insurance	4.21	5.95	4.02	4.22
Utilities	3.54	4.83	3.58	3.40
Dues & professional fees	1.44	2.44	0.68	1.71
Interest	3.32	2.54	3.17	3.41
Mach & bldg depreciation	27.83	35.96	25.79	29.01
Miscellaneous	3.62	3.18	3.84	4.40
Total overhead expenses per acre	55.03	73.23	54.45	56.50
Total dir & ovhd expenses per acre	290.89	366.02	293.47	277.18
Net return per acre	32.55	-82.10	20.46	104.95
Government payments	9.53	7.64	9.34	10.59
Net return with govt pmts	42.08	-74.45	29.80	115.54
Labor & management charge	22.49	23.59	22.06	22.18
Net return over lbr & mgt	19.59	-98.05	7.74	93.36
Cost of Production				
Total direct expense per bu.	4.44	6.84	4.34	3.49
Total dir & ovhd exp per bu.	5.48	8.55	5.33	4.38
Less govt & other income	4.11	6.29	4.32	3.29
With labor & management	4.53	6.84	4.72	3.64
Net value per unit	4.91	4.58	4.86	5.16
Machinery cost per acre	73.08	95.13	73.97	65.03
Est. labor hours per acre	1.05	1.13	1.16	1.00

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Wheat, Spring on Share Rent

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	25	5	5	5
Acres	326.33	184.93	178.20	747.28
Yield per acre (bu.)	61.45	39.95	56.02	74.09
Operators share of yield %	64.53	60.69	72.32	61.36
Value per bu.	4.81	4.51	4.87	4.83
Total product return per acre	190.89	109.25	197.32	219.50
Hedging gains/losses per acre	1.04	4.24	-	1.22
Crop insurance per acre	26.10	8.93	16.45	33.93
Other crop income per acre	21.60	18.07	32.13	14.11
Gross return per acre	239.62	140.50	245.91	268.76
Direct Expenses				
Seed and plants	12.91	5.87	19.69	11.89
Fertilizer	52.96	62.04	60.88	50.42
Crop chemicals	32.06	34.11	30.54	31.65
Crop insurance	11.46	6.76	11.58	10.27
Drying expense	0.14	1.28	-	-
Fuel & oil	10.28	10.53	12.05	9.69
Repairs	19.42	26.59	33.97	16.63
Custom hire	4.31	14.31	2.06	2.88
Marketing	0.07	-	0.61	-
Operating interest	3.16	6.96	2.15	1.25
Miscellaneous	0.66	5.05	0.19	0.09
Total direct expenses per acre	147.43	173.50	173.72	134.77
Return over direct exp per acre	92.19	-33.00	72.19	133.99
Overhead Expenses				
Custom hire	0.58	1.84	-	0.12
Hired labor	7.57	11.06	5.08	10.04
Machinery leases	1.67	0.10	0.97	0.74
Building leases	0.49	0.45	-	0.63
Farm insurance	3.97	3.42	7.13	2.78
Utilities	3.02	3.60	4.31	1.85
Dues & professional fees	0.52	1.39	0.73	0.26
Interest	1.79	1.67	2.98	0.33
Mach & bldg depreciation	30.22	28.86	28.98	25.23
Miscellaneous	3.43	5.49	6.65	2.09
Total overhead expenses per acre	53.27	57.88	56.83	44.08
Total dir & ovhd expenses per acre	200.70	231.37	230.55	178.85
Net return per acre	38.92	-90.88	15.36	89.91
Government payments	8.04	8.19	14.36	5.25
Net return with govt pmts	46.96	-82.69	29.72	95.16
Labor & management charge	18.36	18.15	30.34	13.45
Net return over lbr & mgt	28.60	-100.84	-0.62	81.71
Cost of Production				
Total direct expense per bu.	3.72	7.16	4.29	2.96
Total dir & ovhd exp per bu.	5.06	9.54	5.69	3.93
Less govt & other income	3.63	7.92	4.14	2.74
With labor & management	4.09	8.67	4.89	3.03
Net value per unit	4.84	4.68	4.87	4.86
Machinery cost per acre	66.00	82.22	79.40	54.00
Est. labor hours per acre	0.87	0.99	1.07	0.75

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.

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Beef Cow-Calf -- Average Per Cwt. Produced

	Avg. Of All Farms		Low 20%		40 - 60%		High 20%	
Number of farms	26		5		5		6	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Beef Calves sold (lb)	34.54	52.22	86.94	129.68	43.52	64.94	11.78	17.82
Transferred out (lb)	65.46	96.07	13.06	20.10	56.48	81.25	88.22	127.23
Cull sales		16.70		19.72		9.75		13.75
Government payments		4.03		0.67		-		5.10
Other income		0.47		0.68		1.20		0.19
Purchased		-13.75		-6.16		-14.10		-9.06
Transferred in		-28.91		-7.67		-27.06		-39.46
Inventory change		0.38		-56.58		15.80		16.99
Gross margin		127.21		100.44		131.77		132.56
Direct Expenses								
Protein Vit Minerals (lb.)	61.82	4.72	28.75	6.38	248.97	4.49	1.29	1.09
Corn Silage (lb.)	538.44	8.29	1,010.00	15.57	160.90	2.76	576.76	7.16
Hay, Alfalfa (lb.)	85.56	3.35	109.70	3.45	109.93	4.77	100.60	4.02
Hay, Grass (lb.)	915.86	23.57	1,678.80	44.09	864.93	27.43	758.26	13.77
Pasture (aum)	1.20	21.45	1.44	24.48	1.41	35.17	1.09	17.95
Stover (lb.)	48.72	0.71	337.68	5.07	-	-	-	-
DDGS, dry (lb.)	20.71	1.03	137.22	6.77	0.28	0.02	9.72	0.51
Other feed stuffs (lb)	165.62	6.95	166.64	6.49	116.76	4.26	165.05	7.52
Veterinary		5.49		9.06		3.84		5.51
Supplies		4.38		4.70		2.99		3.35
Fuel & oil		4.69		5.92		3.84		3.22
Repairs		9.57		15.12		6.72		6.12
Custom hire		1.00		0.81		2.96		-
Operating interest		1.95		4.71		1.28		1.00
Total direct expenses		97.15		152.62		100.55		71.23
Return over direct expense		30.06		-52.18		31.22		61.33
Overhead Expenses								
Hired labor		2.90		6.35		0.94		3.09
Farm insurance		2.14		3.23		1.84		1.13
Utilities		2.22		2.54		2.56		1.31
Mach & bldg depreciation		8.02		6.93		6.93		7.62
Miscellaneous		5.43		7.68		6.14		3.25
Total overhead expenses		20.71		26.73		18.40		16.40
Total dir & ovhd expenses		117.86		179.35		118.95		87.64
Net return		9.35		-78.92		12.82		44.93
Labor & management charge		12.71		10.85		13.58		7.46
Net return over lbr & mgt		-3.36		-89.77		-0.76		37.47
Cost of Production Per Cwt. Produced								
Total direct expense per unit		97.15		152.62		100.55		71.23
Total dir& ovhd expense per unit		117.86		179.35		118.95		87.64
With other revenue adjustments		139.45		229.67		134.55		100.32
With labor and management		152.16		240.52		148.13		107.78
Est. labor hours per unit		0.98		1.42		0.89		0.77
Other Information								
Number of cows		205.5		150.7		201.8		223.2
Pregnancy percentage		96.4		96.9		99.7		91.1
Pregnancy loss percentage		1.6		2.3		0.6		1.6
Culling percentage		11.7		13.4		7.5		11.2
Calving percentage		94.8		94.6		99.1		89.7
Weaning percentage		90.7		89.5		95.9		87.0
Calves sold per cow		0.94		0.91		1.01		0.94
Calf death loss percent		4.7		6.9		3.4		2.6
Cow death loss percent		1.6		2.9		1.0		0.8
Average weaning weight		549		542		538		586
Lb. weaned/exposed female		498		485		517		510
Feed cost per cow		372.18		553.76		436.40		304.96
Avg wgt/ Beef Calves sold		558		550		573		532
Avg price / cwt.		151.18		149.17		149.22		151.26

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Beef Cow-Calf -- Average Per Cow

	Avg. Of All Farms		Low 20%		40 - 60%		High 20%	
Number of farms	26		5		5		6	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Beef Calves sold (lb)	183.5	277.42	428.7	639.49	240.7	359.14	69.1	104.47
Transferred out (lb)	347.7	510.32	64.4	99.11	312.4	449.32	517.1	745.82
Cull sales		88.71		97.22		53.90		80.58
Government payments		21.39		3.32		-		29.87
Other income		2.51		3.33		6.64		1.12
Purchased		-73.02		-30.38		-77.98		-53.09
Transferred in		-153.59		-37.81		-149.66		-231.28
Inventory change		2.02		-279.01		87.39		99.58
Gross margin		675.75		495.26		728.74		777.07
Direct Expenses								
Protein Vit Minerals (lb.)	328.4	25.08	141.8	31.47	1,376.9	24.85	7.6	6.39
Corn Silage (lb.)	2,860.3	44.02	4,980.4	76.80	889.9	15.26	3,381.0	41.95
Hay, Alfalfa (lb.)	454.5	17.77	540.9	17.00	608.0	26.38	589.7	23.57
Hay, Grass (lb.)	4,865.2	125.21	8,278.4	217.43	4,783.4	151.72	4,444.9	80.73
Pasture (aum)	6.4	113.95	7.1	120.69	7.8	194.52	6.4	105.23
Stover (lb.)	258.8	3.76	1,665.1	24.98	-	-	-	-
DDGS, dry (lb.)	110.0	5.48	676.7	33.40	1.5	0.12	57.0	2.99
Other feed stuffs (lb)	879.8	36.91	821.7	32.00	645.7	23.56	967.5	44.09
Veterinary		29.17		44.66		21.24		32.28
Supplies		23.26		23.19		16.51		19.64
Fuel & oil		24.93		29.20		21.25		18.90
Repairs		50.86		74.54		37.17		35.90
Custom hire		5.33		4.02		16.39		-
Operating interest		10.35		23.23		7.09		5.86
Total direct expenses		516.08		752.59		556.06		417.55
Return over direct expense		159.67		-257.33		172.68		359.52
Overhead Expenses								
Hired labor		15.41		31.30		5.21		18.09
Farm insurance		11.38		15.93		10.16		6.65
Utilities		11.79		12.55		14.13		7.71
Mach & bldg depreciation		42.59		34.16		38.33		44.65
Miscellaneous		28.83		37.89		33.95		19.07
Total overhead expenses		109.99		131.82		101.78		96.17
Total dir & ovhd expenses		626.07		884.41		657.84		513.72
Net return		49.68		-389.15		70.90		263.36
Labor & management charge		67.52		53.53		75.11		43.73
Net return over lbr & mgt		-17.84		-442.67		-4.21		219.63
Cost of Production Per Cwt. Produced								
Total direct expense per unit		97.15		152.62		100.55		71.23
Total dir& ovhd expense per unit		117.86		179.35		118.95		87.64
With other revenue adjustments		139.45		229.67		134.55		100.32
With labor and management		152.16		240.52		148.13		107.78
Est. labor hours per unit		5.18		7.00		4.90		4.50
Other Information								
Number of cows		205.5		150.7		201.8		223.2
Pregnancy percentage		96.4		96.9		99.7		91.1
Pregnancy loss percentage		1.6		2.3		0.6		1.6
Culling percentage		11.7		13.4		7.5		11.2
Calving percentage		94.8		94.6		99.1		89.7
Weaning percentage		90.7		89.5		95.9		87.0
Calves sold per cow		0.94		0.91		1.01		0.94
Calf death loss percent		4.7		6.9		3.4		2.6
Cow death loss percent		1.6		2.9		1.0		0.8
Average weaning weight		549		542		538		586
Lb. weaned/exposed female		498		485		517		510
Feed cost per cow		372.18		553.76		436.40		304.96
Avg wgt/ Beef Calves sold		558		550		573		532
Avg price / cwt.		151.18		149.17		149.22		151.26

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

	Avg. Of All Farms		Low 20%		40 - 60%		High 20%	
Number of farms	30		6		6		6	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Beef Calves sold (lb)	58.68	84.02	39.93	58.35	47.63	68.77	85.21	122.43
Transferred out (lb)	19.39	29.89	2.85	4.82	27.45	44.12	14.24	20.86
Cull sales		18.81		24.35		16.06		17.90
Insurance income		0.27		-		-		-
Other income		1.91		-		1.75		0.18
Purchased		-32.19		-57.61		-41.93		-20.87
Transferred in		-13.54		-0.92		-12.00		-21.00
Inventory change		34.97		69.27		63.74		18.73
Gross margin		124.14		98.26		140.53		138.23
Direct Expenses								
Protein Vit Minerals (lb.)	147.61	4.50	37.87	7.11	4.94	5.02	5.70	2.72
Complete Ration (lb.)	17.70	2.64	54.29	4.07	16.03	3.95	-	-
Corn Silage (lb.)	479.82	6.97	362.35	5.44	2.10	0.04	1.24	0.02
Hay, Alfalfa (lb.)	159.31	6.48	613.95	27.66	57.20	1.43	33.81	1.30
Hay, Grass (lb.)	916.78	25.76	842.95	22.43	1,470.69	41.23	990.42	30.48
Pasture (aum)	1.39	27.76	2.24	40.17	1.35	24.57	1.22	26.79
Other feed stuffs (lb)	256.89	8.97	82.99	4.09	165.92	6.70	202.08	5.18
Veterinary		4.30		4.14		5.00		3.90
Supplies		4.64		4.48		3.06		2.46
Fuel & oil		4.77		6.28		6.94		4.26
Repairs		6.94		12.30		9.21		4.23
Custom hire		2.52		3.16		5.02		0.80
Marketing		1.77		3.51		2.99		1.42
Operating interest		3.22		5.38		3.95		3.38
Total direct expenses		111.23		150.22		119.11		86.93
Return over direct expense		12.91		-51.96		21.42		51.29
Overhead Expenses								
Hired labor		1.89		1.50		4.35		-
Interest		4.77		10.10		11.50		1.45
Mach & bldg depreciation		8.28		10.29		10.70		6.15
Miscellaneous		7.53		11.27		8.80		6.77
Total overhead expenses		22.47		33.17		35.35		14.36
Total dir & ovhd expenses		133.70		183.39		154.47		101.30
Net return		-9.56		-85.12		-13.94		36.93
Labor & management charge		12.67		17.62		15.97		15.17
Net return over lbr & mgt		-22.23		-102.75		-29.90		21.76
Cost of Production Per Cwt. Produced								
Total direct expense per unit		111.23		150.22		119.11		86.93
Total dir& ovhd expense per unit		133.70		183.39		154.47		101.30
With other revenue adjustments		154.69		223.63		163.48		105.38
With labor and management		167.36		241.25		179.44		120.55
Est. labor hours per unit		0.97		1.26		1.18		1.16
Other Information								
Number of cows		132.1		125.8		126.5		127.8
Pregnancy percentage		97.2		97.5		94.7		99.2
Pregnancy loss percentage		1.7		3.3		1.2		0.4
Culling percentage		14.2		17.5		9.7		12.0
Calving percentage		95.6		94.3		93.5		98.8
Weaning percentage		91.3		88.1		88.5		96.3
Calves sold per cow		0.71		0.33		0.65		0.98
Calf death loss percent		5.9		8.3		5.1		3.1
Cow death loss percent		2.2		3.6		2.2		0.4
Average weaning weight		532		466		554		575
Lb. weaned/exposed female		486		410		490		554
Feed cost per cow		495.10		502.98		424.10		418.60
Avg wgt/ Beef Calves sold		677		577		625		640
Avg price / cwt.		143.18		146.12		144.39		143.67

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

	Avg. Of All Farms		Low 20%		40 - 60%		High 20%	
Number of farms	30		6		6		6	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Beef Calves sold (lb)	349.8	500.77	181.0	264.48	243.6	351.68	536.5	770.78
Transferred out (lb)	115.6	178.12	12.9	21.85	140.4	225.62	89.6	131.35
Cull sales		112.12		110.36		82.15		112.71
Insurance income		1.60		-		-		-
Other income		11.36		-		8.97		1.12
Purchased		-191.83		-261.11		-214.42		-131.39
Transferred in		-80.69		-4.17		-61.34		-132.20
Inventory change		208.43		313.97		325.94		117.90
Gross margin		739.88		445.39		718.59		870.26
Direct Expenses								
Protein Vit Minerals (lb.)	879.7	26.80	171.7	32.25	25.3	25.69	35.9	17.12
Complete Ration (lb.)	105.5	15.72	246.1	18.46	81.9	20.21	-	-
Corn Silage (lb.)	2,859.7	41.55	1,642.4	24.64	10.8	0.19	7.8	0.11
Hay, Alfalfa (lb.)	949.5	38.60	2,782.8	125.36	292.5	7.31	212.9	8.17
Hay, Grass (lb.)	5,464.0	153.55	3,820.8	101.66	7,520.3	210.83	6,235.5	191.90
Pasture (aum)	8.3	165.44	10.2	182.09	6.9	125.63	7.7	168.65
Other feed stuffs (lb)	1,531.1	53.45	376.2	18.54	848.4	34.24	1,272.3	32.63
Veterinary		25.62		18.76		25.57		24.56
Supplies		27.68		20.32		15.65		15.47
Fuel & oil		28.43		28.45		35.50		26.85
Repairs		41.36		55.74		47.10		26.66
Custom hire		15.03		14.33		25.66		5.01
Marketing		10.55		15.91		15.28		8.91
Operating interest		19.17		24.40		20.20		21.27
Total direct expenses		662.94		680.89		609.08		547.32
Return over direct expense		76.93		-235.50		109.51		322.94
Overhead Expenses								
Hired labor		11.29		6.81		22.23		-
Interest		28.44		45.78		58.82		9.11
Mach & bldg depreciation		49.33		46.64		54.71		38.70
Miscellaneous		44.87		51.09		45.02		42.61
Total overhead expenses		133.94		150.33		180.78		90.42
Total dir & ovhd expenses		796.88		831.22		789.86		637.74
Net return		-57.01		-385.83		-71.27		232.52
Labor & management charge		75.51		79.88		81.64		95.54
Net return over lbr & mgt		-132.51		-465.71		-152.91		136.99
Cost of Production Per Cwt. Produced								
Total direct expense per unit		111.23		150.22		119.11		86.93
Total dir& ovhd expense per unit		133.70		183.39		154.47		101.30
With other revenue adjustments		154.69		223.63		163.48		105.38
With labor and management		167.36		241.25		179.44		120.55
Est. labor hours per unit		5.79		5.71		6.01		7.31
Other Information								
Number of cows		132.1		125.8		126.5		127.8
Pregnancy percentage		97.2		97.5		94.7		99.2
Pregnancy loss percentage		1.7		3.3		1.2		0.4
Culling percentage		14.2		17.5		9.7		12.0
Calving percentage		95.6		94.3		93.5		98.8
Weaning percentage		91.3		88.1		88.5		96.3
Calves sold per cow		0.71		0.33		0.65		0.98
Calf death loss percent		5.9		8.3		5.1		3.1
Cow death loss percent		2.2		3.6		2.2		0.4
Average weaning weight		532		466		554		575
Lb. weaned/exposed female		486		410		490		554
Feed cost per cow		495.10		502.98		424.10		418.60
Avg wgt/ Beef Calves sold		677		577		625		640
Avg price / cwt.		143.18		146.12		144.39		143.67

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Beef Replacement Heifers -- Average Per Head

	Avg. Of All Farms	
Number of farms	12	
	Quantity	Value
Beef Replace sold (hd)	0.34	355.81
Transferred out (hd)	0.81	1,116.57
Cull sales (hd)	0.01	10.92
Government payments		18.55
Purchased (hd)	0.00	-2.31
Transferred in (hd)	0.87	-786.96
Inventory change (hd)	-0.30	-252.28
Gross margin		460.30
Direct Expenses		
Protein Vit Minerals (lb.)	258.85	24.16
Creep / Starter (lb.)	66.59	6.66
Complete Ration (lb.)	124.53	6.66
Barley (bu.)	0.20	0.60
Corn (bu.)	1.38	4.34
Corn Silage (lb.)	3,234.30	55.28
Hay, Alfalfa (lb.)	300.69	13.16
Hay, Grass (lb.)	2,493.11	70.80
Pasture (aum)	17.02	75.36
Other feed stuffs (lb)	412.04	7.02
Breeding fees		6.39
Veterinary		13.31
Supplies		8.04
Fuel & oil		6.50
Repairs		9.78
Custom hire		5.21
Total direct expenses		313.28
Return over direct expense		147.01
Overhead Expenses		
Hired labor		7.15
Utilities		3.40
Mach & bldg depreciation		14.54
Miscellaneous		13.50
Total overhead expenses		38.60
Total dir & ovhd expenses		351.88
Net return		108.42
Labor & management charge		21.33
Net return over lbr & mgt		87.09
Est. labor hours per unit		1.05
Other Information		
No. purchased or trans in		52
Number sold or trans out		68
Average number of head		59
Percentage death loss		0.6
Feed cost per average head		264.05
Feed cost/head sold/trans		230.61

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Beef Replacement Heifers -- Average Per Head Sold/Trans

	Avg. Of All Farms	
Number of farms	12	
	Quantity	Value
Beef Replace sold (hd)	0.3	310.75
Transferred out (hd)	0.7	975.15
Cull sales (hd)	0.0	9.54
Government payments		16.20
Purchased (hd)	0.0	-2.02
Transferred in (hd)	0.8	-687.29
Inventory change (hd)	-0.3	-220.33
Gross margin		402.00
Direct Expenses		
Protein Vit Minerals (lb.)	226.1	21.10
Creep / Starter (lb.)	58.2	5.82
Complete Ration (lb.)	108.8	5.82
Barley (bu.)	0.2	0.52
Corn (bu.)	1.2	3.79
Corn Silage (lb.)	2,824.7	48.28
Hay, Alfalfa (lb.)	262.6	11.49
Hay, Grass (lb.)	2,177.3	61.83
Pasture (aum)	14.9	65.82
Other feed stuffs (lb)	359.9	6.13
Breeding fees		5.58
Veterinary		11.62
Supplies		7.02
Fuel & oil		5.68
Repairs		8.55
Custom hire		4.55
Total direct expenses		273.61
Return over direct expense		128.39
Overhead Expenses		
Hired labor		6.25
Utilities		2.97
Mach & bldg depreciation		12.70
Miscellaneous		11.79
Total overhead expenses		33.71
Total dir & ovhd expenses		307.31
Net return		94.69
Labor & management charge		18.63
Net return over lbr & mgt		76.06
Est. labor hours per unit		0.92
Other Information		
No. purchased or trans in		52
Number sold or trans out		68
Average number of head		59
Percentage death loss		0.6
Feed cost per average head		264.05
Feed cost/head sold/trans		230.61

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Beef Backgrounding -- Average Per Cwt. Produced

	Avg. Of All Farms	
Number of farms	13	
	Quantity	Value
Backgnd Beef sold (lb)	341.90	509.30
Transferred out (lb)	73.11	91.15
Other income		0.23
Purchased (lb)	-34.78	-50.27
Transferred in (lb)	-242.52	-360.94
Inventory change (lb)	-37.71	-63.30
Gross margin		126.18
Direct Expenses		
Protein Vit Minerals (lb.)	7.27	3.05
Creep / Starter (lb.)	22.89	3.80
Complete Ration (lb.)	65.15	3.83
Corn (bu.)	4.08	12.60
Corn Silage (lb.)	598.73	9.77
Hay, Alfalfa (lb.)	141.90	5.26
Hay, Grass (lb.)	329.16	7.51
Oats (bu.)	0.41	1.26
DDGS, wet (lb.)	18.80	1.72
Other feed stuffs (lb)	283.92	8.53
Veterinary		5.03
Supplies		3.44
Repairs		3.19
Operating interest		0.90
Total direct expenses		69.90
Return over direct expense		56.28
Overhead Expenses		
Utilities		0.93
Mach & bldg depreciation		2.99
Miscellaneous		3.10
Total overhead expenses		7.02
Total dir & ovhd expenses		76.92
Net return		49.26
Labor & management charge		3.79
Net return over lbr & mgt		45.47
Cost of Production Per Cwt. Produced		
Total direct expense per unit		131.12
Total dir& ovhd expense per unit		132.81
With other revenue adjustments		132.81
With labor and management		133.73
Est. labor hours per unit		0.32
Other Information		
No. purchased or trans in		169
Number sold or trans out		193
Percentage death loss		0.2
Avg. daily gain (lb.)		2.15
Lb. of conc / lb. of gain		4.82
Lb. of feed / lb. of gain		13.21
Feed cost per cwt. of gain		57.34
Feed cost per head		66.67
Avg wgt / Backgnd Beef sold		689
Avg sales price / cwt.		148.96

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Beef Backgrounding -- Average Per Head

	Avg. Of All Farms	
Number of farms	13	
	Quantity	Value
Backgnd Beef sold (lb)	397.5	592.18
Transferred out (lb)	85.0	105.99
Other income		0.27
Purchased (lb)	-40.4	-58.45
Transferred in (lb)	-282.0	-419.68
Inventory change (lb)	-43.9	-73.60
Gross margin		146.71
Direct Expenses		
Protein Vit Minerals (lb.)	8.4	3.55
Creep / Starter (lb.)	26.6	4.42
Complete Ration (lb.)	75.8	4.45
Barley (bu.)	0.3	0.78
Corn (bu.)	4.7	14.65
Corn Silage (lb.)	696.2	11.35
Hay, Alfalfa (lb.)	165.0	6.12
Hay, Grass (lb.)	382.7	8.74
Oats (bu.)	0.5	1.47
DDGS, dry (lb.)	116.7	5.00
DDGS, wet (lb.)	21.9	2.00
Other feed stuffs (lb)	213.2	4.14
Veterinary		5.85
Supplies		2.49
Fuel & oil		1.51
Repairs		3.71
Operating interest		1.04
Total direct expenses		81.27
Return over direct expense		65.44
Overhead Expenses		
Mach & bldg depreciation		3.47
Miscellaneous		4.69
Total overhead expenses		8.16
Total dir & ovhd expenses		89.43
Net return		57.28
Labor & management charge		4.41
Net return over lbr & mgt		52.87
Cost of Production Per Cwt. Produced		
Total direct expense per unit		131.12
Total dir& ovhd expense per unit		132.81
With other revenue adjustments		132.81
With labor and management		133.73
Est. labor hours per unit		0.37
Other Information		
No. purchased or trans in		169
Number sold or trans out		193
Percentage death loss		0.2
Avg. daily gain (lb.)		2.15
Lb. of conc / lb. of gain		4.82
Lb. of feed / lb. of gain		13.21
Feed cost per cwt. of gain		57.34
Feed cost per head		66.67
Avg wgt / Backgnd Beef sold		689
Avg sales price / cwt.		148.96

Figure 1. Gross Cash Income Per Farm

N.D. Farm Business Management Education Program

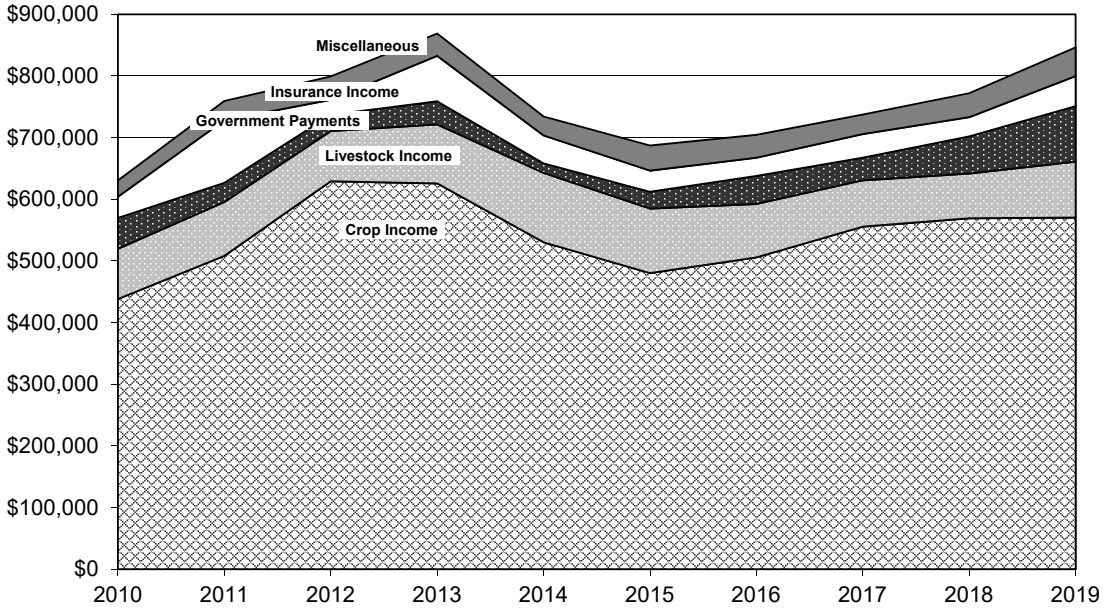

Figure 2. Net Farm Income (Accrual) Per Farm

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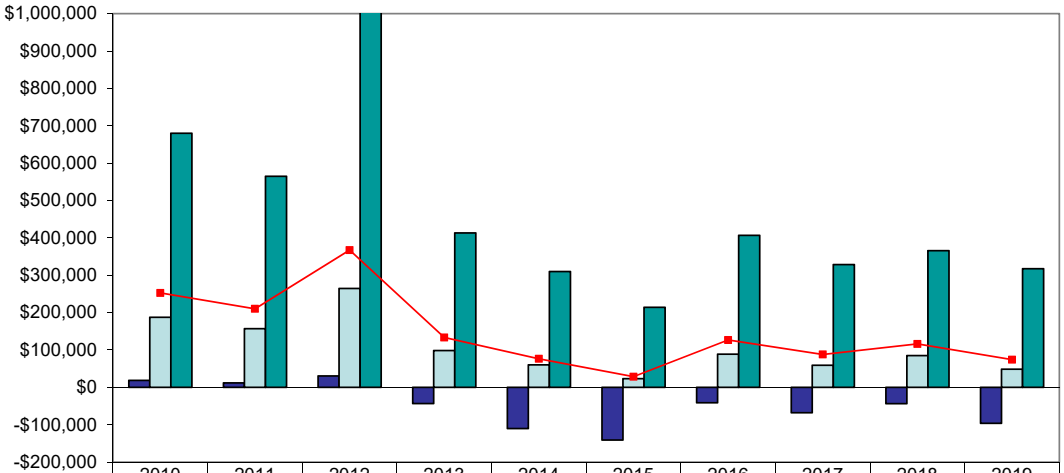

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
20% Low Profit	18,597	12,000	30,429	(43,383)	(110,282)	(141,049)	(41,364)	(68,031)	(43,700)	(96,157)
Middle 60% Profit	187,334	157,058	264,545	98,437	60,113	23,278	88,621	59,071	85,076	48,615
20% High Profit	679,943	564,694	1,007,498	413,074	310,010	214,214	406,621	328,621	365,638	317,478
Average All Farms	252,658	210,218	367,317	133,466	76,404	28,600	126,752	88,026	116,227	74,100

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

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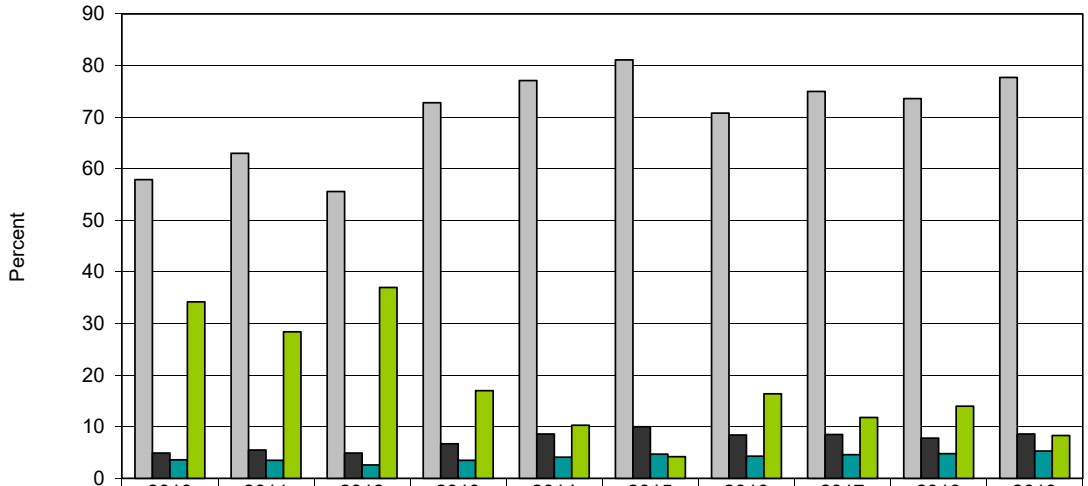
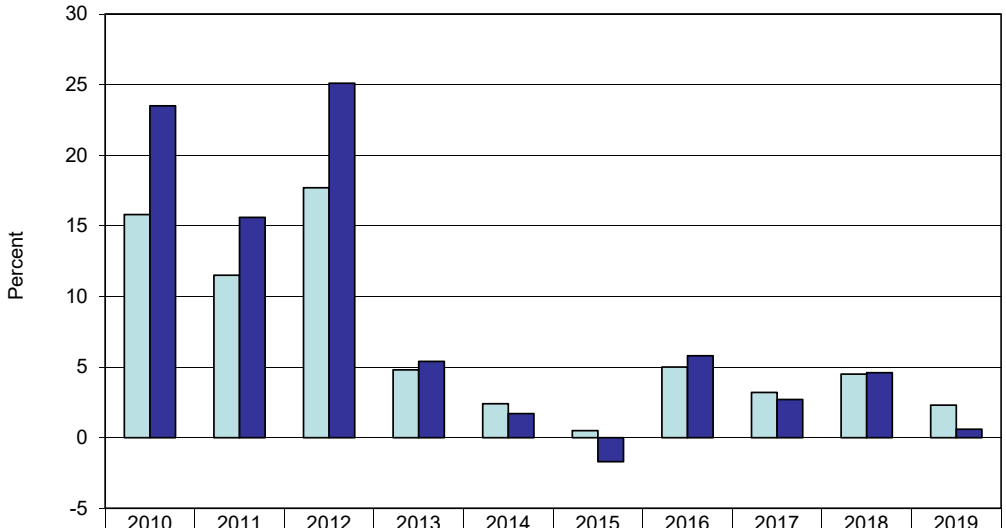


	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Operating Exp %	57.9	63	55.6	72.8	77.1	81.1	70.8	75	73.6	77.7
Depreciation %	4.9	5.5	4.9	6.7	8.6	10	8.4	8.5	7.8	8.6
Interest Exp. %	3.6	3.5	2.6	3.5	4.1	4.7	4.3	4.6	4.8	5.4
Net Farm Inc. %	34.2	28.4	37	17	10.3	4.2	16.4	11.8	14	8.3

Figure 4. Profitability Measures Per Farm

N.D. Farm Business Management Education Program



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Rate of Return on Assets	15.8	11.5	17.7	4.8	2.4	0.5	5	3.2	4.5	2.3
Rate of Return on Equity	23.5	15.6	25.1	5.4	1.7	-1.7	5.8	2.7	4.6	0.6

Figure 5. Assets and Liabilities Per Farm, 2019

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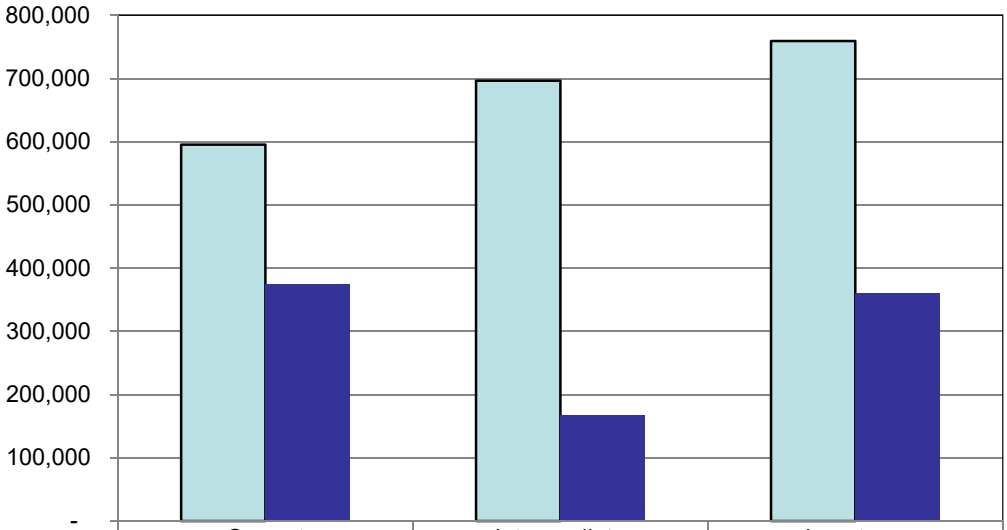

	Current	Intermediate	Longterm
Farm Assets	595,318	696,553	759,257
Farm Liabilities	373,440	166,639	359,261

Figure 6. Total Farm Assets and Liabilities

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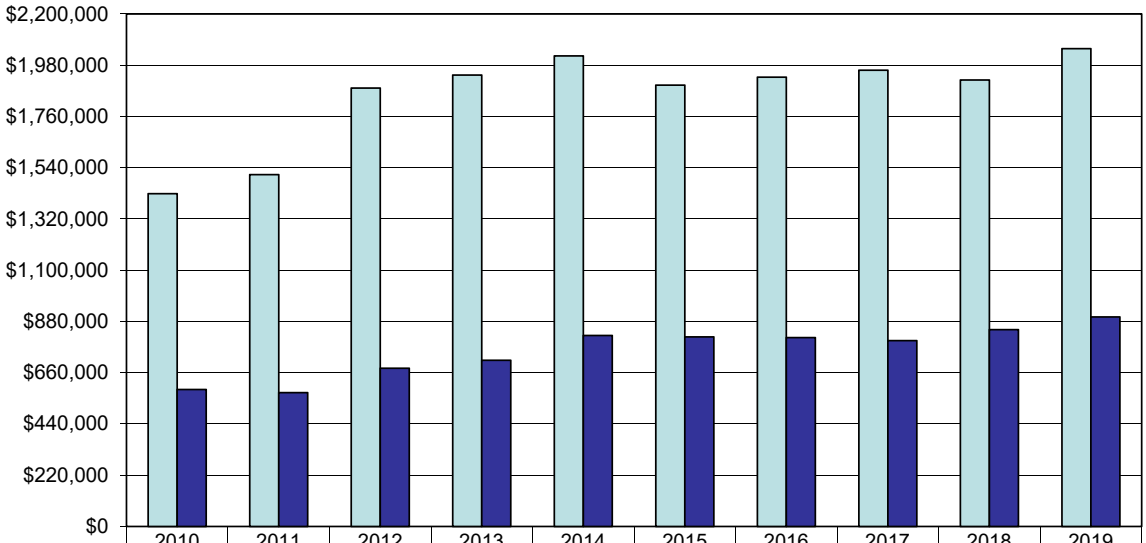

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Farm Assets	1,428,478	1,510,082	1,881,739	1,937,795	2,020,027	1,894,288	1,928,477	1,958,439	1,916,310	2,051,129
Farm Liabilities	587,640	574,429	679,331	713,230	819,728	813,541	810,793	797,601	845,018	899,340

Figure 7. Household and Personal Expenses

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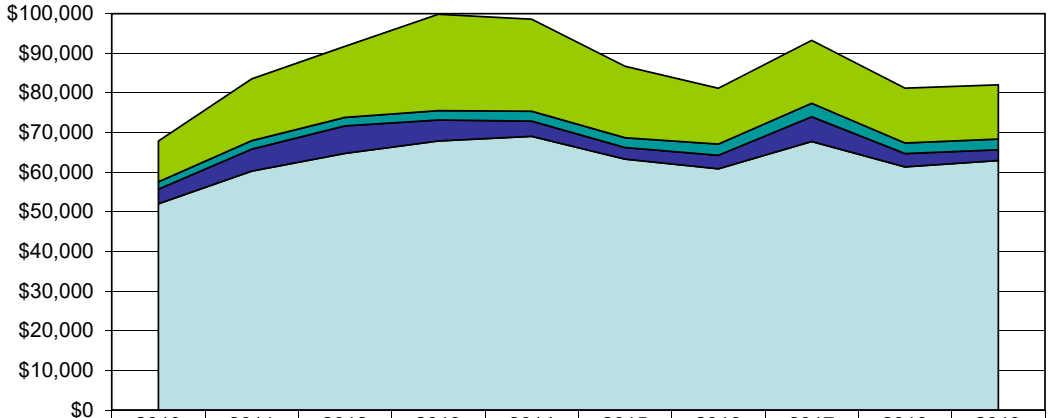
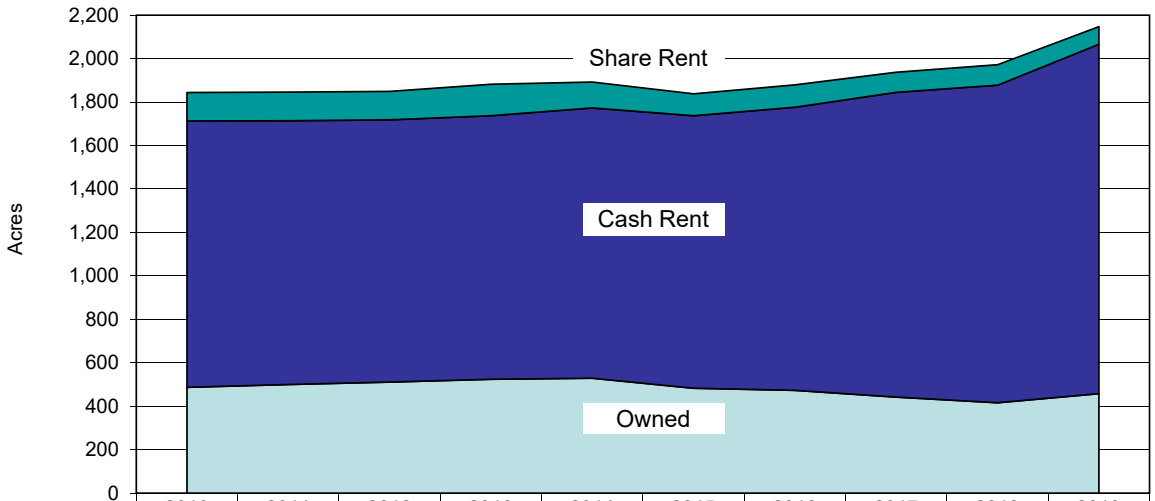


	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Income Taxes	10,283	15,594	17,926	24,311	23,221	18,015	14,097	15,869	13,835	13,667
Life Insurance	1,864	2,129	2,145	2,371	2,495	2,473	2,834	3,416	2,667	2,702
Furnishings & Vehicle	3,675	5,546	6,937	5,303	3,829	2,928	3,404	6,221	3,354	2,718
Family Living	52,039	60,274	64,751	67,870	69,056	63,300	60,857	67,762	61,352	62,951

Figure 8. Crop Acreage Per Farm

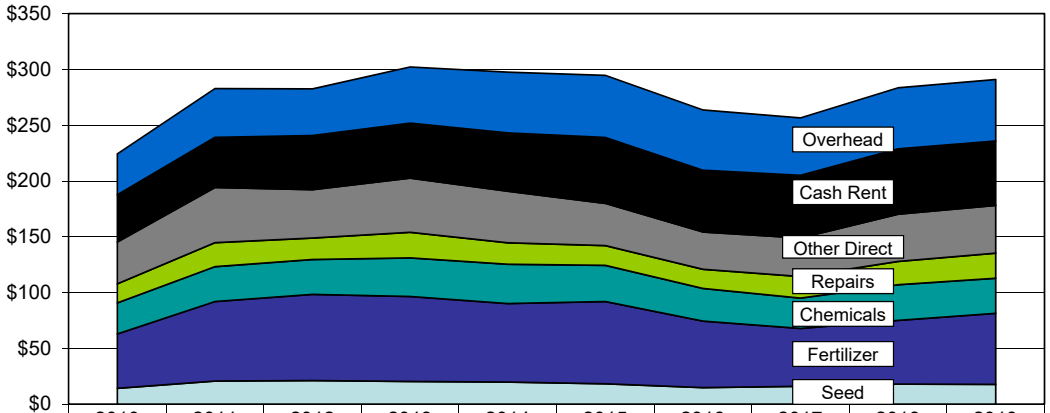
N.D. Farm Business Management Education Program



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Share Rent	131	132	131	145	119	101	103	92	94	81
Cash Rent	1,226	1,214	1,207	1,213	1,244	1,254	1,303	1,403	1,462	1,608
Owned	487	500	511	524	529	483	473	442	416	458

Figure 9. Spring Wheat Costs Per Acre

N.D. Farm Business Management Education Program



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Overhead	36.67	43.73	41.88	50.35	54.49	55.64	54.03	51.43	54.75	55.03
Cash Rent	42.32	44.91	48.48	49.24	52.24	59.12	55.43	56.17	58.54	57.79
Other Direct	37.54	49.47	43.35	48.60	46.18	37.81	33.41	34.61	42.32	42.77
Repairs	17.09	21.53	19.24	22.96	19.24	17.74	17.19	19.33	20.85	22.56
Chemicals	27.84	31.29	31.27	34.57	35.28	32.45	29.21	27.19	32.03	31.37
Fertilizer	48.70	71.29	77.24	76.15	70.37	73.68	59.63	51.87	57.08	63.70
Seed	14.14	20.59	21.09	20.30	19.72	18.22	14.79	15.89	17.92	17.67

Figure 10. Average Net Return Per Beef Cow

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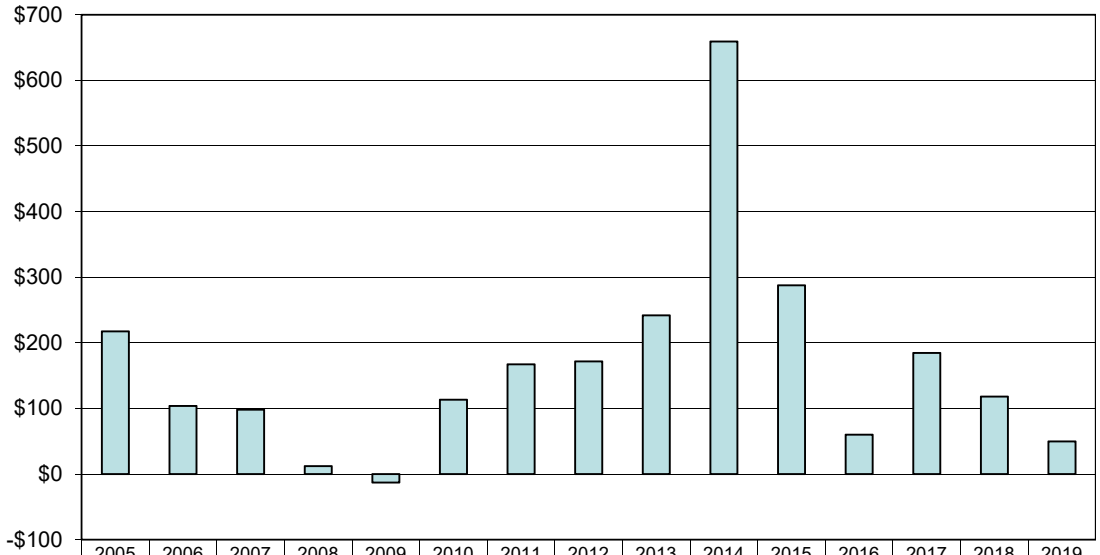

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Avg. Net Return	217.50	103.86	98.11	12.11	-12.85	113.29	167.31	171.70	241.87	659.23	287.66	60.06	184.58	118.07	49.68

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