

Enterprise Analysis Summary for 2015 Crops on Cash Rented Land

Bottineau, Minot and Rugby Farm and Ranch Business Management Education Programs

	Barley	Beans, Pinto	Canola	Corn	Flax	Peas, Field
Number of Farms	22		27	15	14	9
Yield per Acres (bu or cwt)	66.84		18.23	100.62	23.29	46.36
Value per bushel/cwt	\$4.88		\$14.76	\$3.01	\$9.55	\$7.24
Other Product Return per Acre				\$0.53		
Total Product Return per Acre	\$325.86		\$269.08	\$303.28	\$222.37	\$335.74
Crop Insurance, LDP & Other Incom	\$16.86		\$6.41	\$5.75	\$9.32	\$18.09
Gross Return per Acre	\$342.72		\$275.49	\$309.03	\$231.69	\$353.83
Direct Costs per Acre						
Seed	18.19		60.70	70.64	18.96	40.98
Fertilizer	51.04		70.09	87.69	41.67	11.02
Chemicals	35.87		27.04	26.45	21.00	37.56
Crop Insurance	17.87		14.85	19.97	11.80	12.38
Drying				5.29		
Fuel and Oil	13.02		14.30	21.33	11.94	17.47
Repairs	20.50		21.23	31.37	20.67	24.79
Custom Work	8.15		7.87	1.46	5.39	6.60
Land Rent	53.28		45.98	47.33	47.00	43.19
Machinery & Building Leases			0.29			
Operating Interest	5.65		4.33	8.19	5.36	6.51
Miscellaneous Crop Expenses	2.11		1.45	1.61	1.13	1.75
Total Direct Costs per Acre	\$225.68		\$268.13	\$321.33	\$184.92	\$202.25
Return to Overhead per Acre	\$117.04		\$7.36	-\$12.30	\$46.77	\$151.58
Overhead Costs per Acre						
Hired Labor	6.31		4.60	21.86	5.93	10.10
Machinery & Building Leases	1.93		1.43	0.87	1.44	0.63
Farm Insurance	4.29		3.63	5.41	4.78	4.82
Utilities	2.61		2.36	3.26	2.77	2.47
Dues and Professional Fees	2.05		1.38	1.13	0.77	1.80
Interest on Term Loans	3.60		3.05	3.13	3.38	2.27
Machinery and Building Depr.	30.68		28.62	44.79	26.08	42.03
Miscellaneous Farm Expenses	4.31		3.83	3.51	1.94	3.27
Total Overhead Costs per Acre	\$55.78		\$48.90	\$83.96	\$47.09	\$67.39
Total Listed Costs per Acre	\$281.46		\$317.03	\$405.29	\$232.01	\$269.64
Net Return per Acre	\$61.26		-\$41.54	-\$96.26	-\$0.32	\$84.19
Government Payments per Acre	7.59		6.57	7.76	6.00	11.21
Net Return with Gov. Payments	\$68.85		-\$34.97	-\$88.50	\$5.68	\$95.40
Labor & Management Charge	23.37		26.24	31.34	19.16	23.38
Net Return over Labor & Mngt.	\$45.48		-\$61.21	-\$119.84	-\$13.48	\$72.02
Total Direct Costs per Bu/Cwt	3.38		14.71	3.19	8.53	4.36
Total Listed Costs per Bu/Cwt	4.21		17.39	4.03	9.96	5.82
Listed Costs per Bu/Cwt Less Government Payments	3.85		16.68	3.89	9.30	5.18
Costs per bu/Cwt Less Gov. Payments, Other Income & Labor & Management Charge	4.19		18.12	4.20	10.13	5.69
Machinery Cost per Acre	78.20		76.91	100.14	67.71	91.75
Estimated Labor Hours per Acre	1.26		1.25	2.15	1.06	1.33



North Dakota Farm/Ranch Business Management Education



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	Soybeans	Sunflowers, Confectionary	Sunflowers, Oil	Wheat, Durum	Wheat, Hard Red Spring	Wheat, Hard Red Winter
Number of Farms	41		8		49	
Yield per Acres (bu or cwt)	27.92		16.51		49.85	
Value per bushel/cwt	\$8.30		\$19.59		\$4.62	
Other Product Return per Acre					\$0.06	
Total Product Return per Acre	\$231.72		\$323.35		\$230.28	
Crop Insurance, LDP & Other Incom	\$15.06		\$7.05		\$9.54	
Gross Return per Acre	\$246.78		\$330.40		\$239.82	
Direct Costs per Acre						
Seed	77.23		40.56		18.55	
Fertilizer	17.19		57.54		63.21	
Chemicals	21.65		42.04		34.67	
Crop Insurance	13.05		16.98		15.57	
Drying						
Fuel and Oil	12.48		14.64		12.29	
Repairs	20.21		26.61		20.39	
Custom Work	4.12		6.21		4.89	
Land Rent	53.44		49.91		48.86	
Operating Interest	5.17		5.85		4.94	
Miscellaneous Crop Expenses	1.50		1.01		1.66	
Total Direct Costs per Acre	\$226.04		\$261.35		\$225.03	
Return to Overhead per Acre	\$20.74		\$69.05		\$14.79	
Overhead Costs per Acre						
Hired Labor	5.91		10.42		6.19	
Machinery & Building Leases	6.26		0.32		3.67	
Farm Insurance	4.72		3.75		4.46	
Utilities	2.69		2.10		2.49	
Dues and Professional Fees	1.70		0.68		1.48	
Interest on Term Loans	3.37		1.63		3.29	
Machinery and Building Depr.	27.00		37.70		27.45	
Miscellaneous Farm Expenses	4.31		3.88		4.68	
Total Overhead Costs per Acre	\$55.96		\$60.48		\$53.71	
Total Listed Costs per Acre	\$282.00		\$321.83		\$278.74	
Net Return per Acre	-\$35.22		\$8.57		-\$38.92	
Government Payments per Acre	5.81		7.12		5.20	
Net Return with Gov. Payments	-\$29.41		\$15.69		-\$33.72	
Labor & Management Charge	21.74		24.87		20.53	
Net Return over Labor & Mngt.	-\$51.15		-\$9.18		-\$54.25	
Total Direct Costs per Bu/Cwt	8.10		15.83		4.51	
Total Listed Costs per Bu/Cwt	10.10		19.49		5.59	
Listed Costs per Bu/Cwt Less Government Payments	9.35		18.63		5.29	
Costs per bu/Cwt Less Gov. Payments, Other Income & Labor & Management Charge	10.13		20.14		5.71	
Machinery Cost per Acre	73.80		86.50		72.41	
Estimated Labor Hours per Acre	1.24		1.35		1.24	

For more information or to sign up for the DCB Farm & Ranch Business Management Education Program contact one of the following instructors:

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Enterprise Analysis Summary for 2015 Forage Crops on Cash Rented Land

Bottineau, Minot and Rugby Farm and Ranch Business Management Education Programs

	Corn Silage	Hay, Alfalfa	Hay, Mixed Alfalfa/Grass	Hay, Grass	Hay, Small Grain	Pasture
Number of Farms		7	12	20		26
Yield per Acres (tons or AUMs)		1.50	1.38	1.13		0.87
Value per ton or AUM		\$80.71	\$42.54	\$38.34		\$16.99
Other Product Return per Acre						\$0.04
Total Product Return per Acre		\$121.06	\$58.70	\$43.32		\$14.82
Crop Insurance, LDP & Other Incom		\$28.05				\$0.37
Gross Return per Acre		\$149.11	\$58.70	\$43.32		\$15.19
Direct Costs per Acre						
Seed						
Fertilizer		2.71				
Chemicals		0.70				
Crop Insurance		9.40	4.11			
Fuel and Oil		8.17	6.72	6.79		
Repairs		16.99	12.30	12.97		0.67
Custom Work		0.01	0.52			
Land Rent		22.35	24.29	12.84		14.01
Operating Interest		0.82	2.29	1.35		
Miscellaneous Crop Expenses		0.45		1.43		0.95
Total Direct Costs per Acre		\$61.60	\$50.23	\$35.38		\$15.63
Return to Overhead per Acre		\$87.51	\$8.47	\$7.94		-\$0.44
Overhead Costs per Acre						
Hired Labor		1.01	1.18	3.83		
Machinery & Building Leases			0.15			0.67
Farm Insurance		2.84	2.56	1.17		
Utilities		2.86	1.23	1.16		
Dues and Professional Fees		0.25	0.74	0.35		
Interest on Term Loans		1.94	3.55	0.95		
Machinery and Building Depr.		17.59	11.90	13.90		
Miscellaneous Farm Expenses		1.59	0.55	2.20		0.51
Total Overhead Costs per Acre		\$28.08	\$21.86	\$23.56		\$1.18
Total Listed Costs per Acre		\$89.68	\$72.09	\$58.94		\$16.81
Net Return per Acre		\$59.43	-\$13.39	-\$15.62		-\$1.62
Government Payments per Acre		0.03	0.23			0.04
Net Return with Gov. Payments		\$59.46	-\$13.16	-\$15.62		-\$1.58
Labor & Management Charge		13.04	13.17	10.47		0.57
Net Return over Labor & Mngt.		\$46.42	-\$26.33	-\$26.09		-\$2.15
Total Direct Costs per Ton/AUM		41.07	36.40	31.31		17.97
Total Listed Costs per Ton/AUM		59.79	52.24	52.16		19.32
Listed Costs per Ton/AUM Less Government Payments		41.07	52.07	52.16		18.80
Costs per Ton/AUM Less Gov. Payments, Other Income & Labor & Management Charge		49.76	61.62	61.42		19.46
Machinery Cost per Acre		43.19	34.43	35.95		1.80
Estimated Labor Hours per Acre		0.91	0.94	0.85		0.04



North Dakota Farm/Ranch Business Management Education

ND FARM
MANAGEMENT EDUCATION



Enterprise Analysis Summary for 2015 Livestock

Bottineau, Minot and Rugby Farm and Ranch Business Management Education Programs

	Beef Cow-Calf Average per Cow		Beef Backgrounding Average per CWT Produced	
	26		13	
Number of Farms				
	Quantity	Value	Quantity	Value
Beef Calves Sold (pounds)	215.40	429.65	369.33	725.46
Transferred Out (pounds)	321.40	572.75	102.78	183.01
Cull Sales (pounds)		204.33		
Other Income		2.49		
Less Purchased (pounds)		-205.71	0.00	0.00
Less Transferred In (pounds)		-138.69	-171.61	-333.11
Inventory Change (pounds)	6.20	68.61	-201.45	-510.83
Gross Margin (Production in pounds)	543.00	\$933.43	99.05	\$65.47
Direct Expenses				
Barley (bushels)			1.10	2.63
Corn (bushels)			2.59	7.47
Oats (bushels)			0.67	1.58
Corn & Other Silage (pounds)	2817.30	38.92	311.76	4.41
Hay, Alfalfa (pounds)	1000.10	31.79	46.75	1.54
Hay, Grass and Other (pounds)	5375.10	109.10	337.82	7.27
Complete Rations (pounds)			12.60	0.57
Protein, Vitamins & Minerals (lbs)	95.40	29.12	13.16	5.11
Pasture (animal unit months)	7.40	112.47	0.07	1.02
Other Feed Stuffs (pounds)	357.00	17.60	203.63	3.13
Veterinary		31.83		6.91
Livestock Supplies		17.06		0.50
Fuel and Oil		28.99		2.87
Repairs		64.31		5.02
Custom Hire		12.13		2.98
Other Direct Expenses		6.21		
Operating Interest		9.04		1.66
Total Direct Costs/Cow/Cwt Prod.		\$508.57		\$54.67
Return Over Direct Expenses		\$424.86		\$10.80
Overhead Expenses				
Hired Labor		10.91		
Machinery & Building Leases				
Farm Insurance		10.40		
Utilities		12.17		0.88
Dues and Professional Fees		3.65		
Interest on Term Loans		10.34		1.07
Machinery and Building Depr.		59.31		6.72
Miscellaneous Farm Expenses		3.29		2.76
Total Overhead Expenses		\$110.07		\$11.43
Total Direct & Overhead Expenses		\$618.64		\$66.10
Net Return		\$314.79		-\$0.63
Labor & Management Charge		70.52		6.56
Net Return over Labor & Mngt.		\$244.27		-\$7.19
Feed Cost per Cow/Cwt Produced		\$339.00		\$34.73
Weaning Percentage		87.2%		
Average Weaning Weight		552		
Average Daily Gain				1.49
Pounds of Feed per Pound of Gain				9.37
Est. Labor Hours per Cow/Cwt Pro		5.56		0.48

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Executive Summary for 2015

Bottineau, Minot and Rugby Farm and Ranch Business Management Education Programs

Income Statement

Crop Sales	416,040	
Crop Inventory Change	16,266	
Gross Crop Income		432,306
Livestock Sales	72,708	
Livestock Inventory Change	-6,317	
Gross Livestock Income		66,391
Government Payments		30,090
Other Cash Farm Income		74,900
Change in Accounts Receivable		-8,017
Gain or Loss on Hedging Accts.		3,122
Change in Other Assets		1,353
Gain or Loss on Breeding Livst.		-95
Gross Farm Income		600,050
Cash Operating Expense	476,240	
Change in Prepaid Exp. & Sup.	6,268	
Change in Growing Crops	-2,213	
Change in Accounts Payable	-4,790	
Depreciation	64,431	
Total Operating Expense		539,936
Interest Paid	27,399	
Change in Accrued Interest	2,215	
Total Interest Expense		29,614
Total Expenses		569,550
Net Farm Income from Operations		30,500
Gain or Loss on Capital Sales		-625
Net Farm Income		29,875
Change in Earned Net Worth	-8,845	-1%

Financial Standards Measures

	Beginning	Ending
Liquidity		
Current Ratio	1.59	1.54
Working Capital	193,294	189,802
Working Capital to Gross Rev.		31.4%
Solvency (Cost)		
Debt to Asset Ratio	38.0%	39.9%
Equity to Asset Ratio	58.4%	56.1%
Debt to Equity	71.2%	78.4%
Profitability		Cost
Rate of Return on Assets		0.7%
Rate of Return on Equity		-1.6%
Operating Profit Margin		2.2%
Net Farm Income		30,500
EBITDA		124,545
Repayment Capacity		
Capital Debt Repayment Cap.		71,322
Capital Debt Repayment Margin		-21,943
Replacement Margin		-46,630
Term Debt Coverage Ratio		0.76
Replacement Margin Coverage Ratio		0.60
Efficiency		Cost
Asset Turnover Rate		31.8%
Operating Expense Ratio		79.4%
Depreciation Expense Ratio		10.7%
Interest Expense Ratio		4.9%
Net Farm Income Ratio		4.9%



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