

Enterprise Analysis Summary for 2014 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	16		19	19	6	7
Yield per Acres (bu or cwt)	74.44		19.67	119.65	24.28	43.34
Value per bushel/cwt	\$5.14		\$16.23	\$2.94		\$7.43
Other Product Return per Acre	\$1.05					
Total Product Return per Acre	\$383.62		\$319.33	\$351.58	\$306.42	\$322.14
Crop Insurance, LDP & Other Income	\$1.00		\$5.38	\$5.89	\$4.62	\$10.90
Gross Return per Acre	\$384.62		\$324.71	\$357.47	\$311.04	\$333.04
Direct Costs per Acre						
Seed	22.70		56.65	81.92	22.17	59.35
Fertilizer	52.06		71.52	97.12	53.30	15.23
Chemicals	37.68		27.58	30.96	0.00	58.79
Crop Insurance	14.71		11.63	17.92		16.03
Drying	2.72		0.36	2.18		1.70
Fuel and Oil	21.35		19.87	38.52	22.11	22.92
Repairs	25.10		23.22	42.37	25.11	35.70
Custom Work	10.95		12.89	6.28	2.07	7.60
Land Rent			46.60	43.66	43.02	39.94
Machinery & Building Leases			0.11			
Operating Interest	6.38		4.78	6.42	6.88	6.41
Miscellaneous Crop Expenses	49.80		0.36	0.62		0.69
Total Direct Costs per Acre	\$243.45		\$275.57	\$367.97	\$174.66	\$264.36
Return to Overhead per Acre	\$141.17		\$49.14	-\$10.50	\$136.38	\$68.68
Overhead Costs per Acre						
Hired Labor	10.06		6.03	18.78	2.03	9.16
Machinery & Building Leases	2.18		1.43	6.49	0.80	0.63
Farm Insurance	4.13		3.74	5.11	5.82	5.93
Utilities	2.99		1.87	4.22	3.07	3.28
Dues and Professional Fees	1.36		1.01	1.08	0.79	0.71
Interest on Term Loans	5.08		4.05	4.74	4.64	4.67
Machinery and Building Depr.	30.14		25.34	46.03	27.12	38.37
Miscellaneous Farm Expenses	4.60		2.41	8.86	1.93	4.48
Total Overhead Costs per Acre	\$60.54		\$45.88	\$95.31	\$46.20	\$67.23
Total Listed Costs per Acre	\$303.99		\$321.45	\$463.28	\$220.86	\$331.59
Net Return per Acre	\$80.63		\$3.26	-\$105.81	\$90.18	\$1.45
Government Payments per Acre	0.00		0.00	0.00	0.00	3.04
Net Return with Gov. Payments	\$80.63		\$3.26	-\$105.81	\$90.18	\$4.49
Labor & Management Charge	26.31		28.07	37.61	23.34	28.08
Net Return over Labor & Mngt.	\$54.32		-\$24.81	-\$143.42	\$66.84	-\$23.59
Total Direct Costs per Bu/Cwt	3.27		14.01	3.08	8.53	6.10
Total Listed Costs per Bu/Cwt	4.08		16.34	3.87	10.43	7.65
Listed Costs per Bu/Cwt Less Government Payments	4.06		16.07	3.82	10.24	7.33
Costs per bu/Cwt Less Gov. Payments, Other Income & Labor & Management Charge	4.41		17.50	4.14	11.20	7.98
Machinery Cost per Acre	94.80		85.58	142.18	79.31	106.14
Estimated Labor Hours per Acre	1.37		1.37	2.46	0.99	1.35



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	37		9		47	15
Yield per Acres (bu or cwt)	30.35		17.09		53.22	43.89
Value per bushel/cwt	\$9.75		\$20.77		\$5.41	\$4.71
Other Product Return per Acre	\$0.20				\$0.05	
Total Product Return per Acre	\$296.11		\$354.99		\$287.84	\$206.51
Crop Insurance, LDP & Other Income	\$16.72		\$12.72		\$8.51	\$34.29
Gross Return per Acre	\$312.83		\$367.71		\$296.35	\$240.80
Direct Costs per Acre						
Seed	79.40		50.29		19.83	17.97
Fertilizer	20.03		67.67		57.80	69.83
Chemicals	24.59		43.47		39.39	38.39
Crop Insurance	15.52		16.46		14.90	12.01
Drying			1.74		0.95	0.86
Fuel and Oil	22.10		21.81		19.87	21.70
Repairs	25.38		33.37		25.70	24.53
Custom Work	6.40		10.85		6.69	7.61
Land Rent	46.71		46.49		45.53	52.17
Operating Interest	5.19		6.45		4.91	5.19
Miscellaneous Crop Expenses	1.13		1.09		1.80	0.71
Total Direct Costs per Acre	\$246.45		\$299.69		\$237.37	\$250.97
Return to Overhead per Acre	\$66.38		\$68.02		\$58.98	-\$10.17
Overhead Costs per Acre						
Hired Labor	9.80		9.87		8.48	9.81
Machinery & Building Leases	2.52		1.67		1.42	1.73
Farm Insurance	4.49		4.59		4.23	4.52
Utilities	3.42		1.70		3.02	3.21
Dues and Professional Fees	1.21		0.90		1.15	0.44
Interest on Term Loans	4.80		2.70		3.52	4.05
Machinery and Building Depr.	23.42		31.83		25.54	31.82
Miscellaneous Farm Expenses	5.36		2.22		4.63	4.08
Total Overhead Costs per Acre	\$55.02		\$55.48		\$51.99	\$59.66
Total Listed Costs per Acre	\$301.47		\$355.17		\$289.36	\$310.63
Net Return per Acre	\$11.36		\$12.54		\$6.99	-\$69.83
Government Payments per Acre	0.00		0.00		0.21	0.00
Net Return with Gov. Payments	\$11.36		\$12.54		\$7.20	-\$69.83
Labor & Management Charge	26.16		33.86		24.65	24.59
Net Return over Labor & Mngt.	-\$14.80		-\$21.32		-\$17.45	-\$94.42
Total Direct Costs per Bu/Cwt	8.12		17.54		4.46	5.72
Total Listed Costs per Bu/Cwt	9.93		20.78		5.44	7.08
Listed Costs per Bu/Cwt Less Government Payments	9.38		20.04		5.27	6.30
Costs per bu/Cwt Less Gov. Payments, Other Income & Labor & Management Charge	10.24		22.02		5.74	6.86
Machinery Cost per Acre	84.86		99.45		82.65	89.25
Estimated Labor Hours per Acre	1.47		1.33		1.37	1.39

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 2014 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		6	10	15		6
Yield per Acres (tons or AUMs)		2.44	1.40	0.79		0.92
Value per ton or AUM		\$81.82		\$38.09		\$16.65
Other Product Return per Acre						\$0.27
Total Product Return per Acre		\$199.64	\$64.62	\$30.09		\$15.59
Crop Insurance, LDP & Other Income		\$5.90	\$0.52			\$0.70
Gross Return per Acre		\$205.54	\$65.14	\$30.09		\$16.29
Direct Costs per Acre						
Seed						
Fertilizer		34.72				
Chemicals				1.11		
Crop Insurance		1.93				
Fuel and Oil		16.02	7.58	9.95		0.53
Repairs		23.88	12.72	11.90		0.70
Custom Work		1.55				
Land Rent		26.61	25.27	11.01		14.62
Operating Interest		3.08	1.94	1.00		
Miscellaneous Crop Expenses		0.08	0.04	0.08		0.37
Total Direct Costs per Acre		\$107.87	\$47.55	\$35.05		\$16.22
Return to Overhead per Acre		\$97.67	\$17.59	-\$4.96		\$0.07
Overhead Costs per Acre						
Hired Labor		6.03	0.75	4.47		
Machinery & Building Leases		0.43	0.47	0.63		
Farm Insurance		2.86	2.41	1.40		
Utilities		2.52	1.70	0.86		
Dues and Professional Fees		0.54	1.42			
Interest on Term Loans		2.72	3.16	0.75		
Machinery and Building Depr.		16.42	13.19	10.53		0.64
Miscellaneous Farm Expenses		1.18	0.27	0.65		0.63
Total Overhead Costs per Acre		\$32.70	\$23.37	\$19.29		\$1.27
Total Listed Costs per Acre		\$140.57	\$70.92	\$54.34		\$17.49
Net Return per Acre		\$64.97	-\$5.78	-\$24.25		-\$1.20
Government Payments per Acre		0.00	0.00	0.00		0.00
Net Return with Gov. Payments		\$64.97	-\$5.78	-\$24.25		-\$1.20
Labor & Management Charge		19.61	21.67	11.44		0.79
Net Return over Labor & Mngt.		\$45.36	-\$27.45	-\$35.69		-\$1.99
Total Direct Costs per Ton/AUM		44.21	33.96	44.37		17.63
Total Listed Costs per Ton/AUM		57.61	50.66	68.78		19.01
Listed Costs per Ton/AUM Less Government Payments		55.19	50.29	68.78		17.96
Costs per Ton/AUM Less Gov. Payments, Other Income & Labor & Management Charge		63.23	65.76	83.26		18.81
Machinery Cost per Acre		61.60	37.22	33.09		1.96
Estimated Labor Hours per Acre		1.47	1.55	0.84		0.06



North Dakota Farm/Ranch Business Management Education



Enterprise Analysis Summary for 2014 Livestock

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

	Beef Cow-Calf Average per Cow		Beef Backgrounding Average per CWT Produced	
	28		14	
Number of Farms	Quantity	Value	Quantity	Value
Beef Calves Sold (pounds)	205.70	553.19	337.06	672.73
Transferred Out (pounds)	273.00	689.95	125.95	243.86
Cull Sales (pounds)		238.08		
Other Income		9.95		
Less Purchased (pounds)		-173.81	-0.99	-2.06
Less Transferred In (pounds)		-91.25	-196.89	-527.39
Inventory Change (pounds)	25.60	111.67	-165.13	-247.13
Gross Margin (Production in pounds)	504.30	\$1,337.78	100.00	\$140.01
Direct Expenses				
Barley (bushels)			1.49	3.56
Corn (bushels)			2.73	8.83
Oats (bushels)				
Corn & Other Silage (pounds)	2221.00	31.82	514.41	4.99
Hay, Alfalfa (pounds)	614.50	19.13	99.19	2.56
Hay, Grass and Other (pounds)	7115.80	151.49	707.76	15.66
Complete Rations (pounds)	47.40	6.09	27.41	2.30
Protein, Vitamins & Minerals (lbs)	173.80	28.61	61.09	10.08
Pasture (animal unit months)	7.10	105.21	0.05	1.07
Other Feed Stuffs (pounds)	477.30	13.52	64.20	2.96
Veterinary		29.59		
Livestock Supplies		28.88		1.83
Fuel and Oil		41.21		2.77
Repairs		65.80		4.89
Custom Hire		14.79		1.05
Other Direct Expenses		14.43		0.86
Operating Interest		10.92		1.44
Total Direct Costs/Cow/Cwt Prod.		\$561.49		\$64.85
Return Over Direct Expenses		\$776.29		\$75.16
Overhead Expenses				
Hired Labor		21.33		1.29
Machinery & Building Leases				
Farm Insurance		13.12		1.22
Utilities		13.61		1.92
Dues and Professional Fees		4.75		0.42
Interest on Term Loans		9.45		1.05
Machinery and Building Depr.		56.51		4.74
Miscellaneous Farm Expenses		6.90		0.72
Total Overhead Expenses		\$125.67		\$11.36
Total Direct & Overhead Expenses		\$687.16		\$76.21
Net Return		\$650.62		\$63.80
Labor & Management Charge		83.55		7.63
Net Return over Labor & Mngt.		\$567.07		\$56.17
Feed Cost per Cow/Cwt Produced		\$355.87		\$52.01
Weaning Percentage		82.9%		
Average Weaning Weight		556		
Average Daily Gain				1.26
Pounds of Feed per Pound of Gain				13.75
Est. Labor Hours per Cow/Cwt Pro		6.11		0.60

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Executive Summary for 2014

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

Income Statement

Crop Sales	467,397	
Crop Inventory Change	-11,427	
Gross Crop Income		455,970
Livestock Sales	78,969	
Livestock Inventory Change	21,102	
Gross Livestock Income		100,071
Government Payments		15,590
Other Cash Farm Income		91,982
Change in Accounts Receivable		13,094
Gain or Loss on Hedging Accts.		3,283
Change in Other Assets		-985
Gain or Loss on Breeding Lvst.		-36
Gross Farm Income		678,969
Cash Operating Expense	494,028	
Change in Prepaid Exp. & Sup.	7,006	
Change in Growing Crops	-5,991	
Change in Accounts Payable	7,931	
Depreciation	60,561	
Total Operating Expense		563,535
Interest Paid	25,026	
Change in Accrued Interest	3,605	
Total Interest Expense		28,631
Total Expenses		592,166
Net Farm Income from Operations		86,803
Gain or Loss on Capital Sales		649
Net Farm Income		87,452
Change in Earned Net Worth	42,665	2.9%

Financial Standards Measures

Liquidity	Beginning	Ending
Current Ratio	2.08	1.72
Working Capital	286,254	244,360
Working Capital to Gross Rev.		35.4%
Solvency (Cost)	Beginning	Ending
Debt to Asset Ratio	35.2%	36.6%
Equity to Asset Ratio	62.7%	60.4%
Debt to Equity	59.6%	65.5%
Profitability	Cost	
Rate of Return on Assets		3.1%
Rate of Return on Equity		2.8%
Operating Profit Margin		9.4%
Net Farm Income		86,803
EBITDA		175,998
Repayment Capacity		
Capital Debt Repayment Cap.		118,484
Capital Debt Repayment Margin		17,665
Replacement Margin		-7,111
Term Debt Coverage Ratio		1.18
Replacement Margin Coverage Ratio		0.94
Efficiency	Cost	
Asset Turnover Rate		33.5%
Operating Expense Ratio		74.5%
Depreciation Expense Ratio		8.8%
Interest Expense Ratio		4.1%
Net Farm Income Ratio		12.7%



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