

# Enterprise Analysis Summary for 2012 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 Fields	86		68	51	30	
Number of Farms	33		28	26	12	
Acres	123.48		142.94	95.46	87.57	
Yield per Acres (bu or cwt)	63.12		13.28	91.18	17.56	
Value per bushel/cwt	\$6.66		\$27.61	\$6.47	\$13.46	
Other Product Return per Acre	\$0.09			\$0.45	\$0.03	
Total Product Return per Acre	\$420.74		\$366.70	\$590.32	\$236.35	
Crop Insurance, LDP & Other Income	\$1.03		\$14.63	\$2.22	\$5.18	
<b>Gross Return per Acre</b>	<b>\$421.77</b>		<b>\$381.33</b>	<b>\$592.54</b>	<b>\$241.53</b>	
Direct Costs per Acre						
Seed	22.80		49.41	78.16	16.18	
Fertilizer	55.42		71.64	81.18	43.62	
Chemicals	35.61		20.47	20.49	28.14	
Crop Insurance	18.78		13.30	24.04	13.50	
Drying	0.07			1.32		
Fuel and Oil	17.65		18.63	25.79	15.16	
Repairs	20.65		21.77	35.19	12.76	
Custom Work	4.63		6.87	8.03	4.77	
Land Rent	42.34		42.77	43.28	41.01	
Operating Interest	3.69		2.92	6.14	2.78	
Miscellaneous Crop Expenses	0.42		0.63	0.55		
<b>Total Direct Costs per Acre</b>	<b>\$222.06</b>		<b>\$248.41</b>	<b>\$324.17</b>	<b>\$177.92</b>	
<b>Return to Overhead per Acre</b>	<b>\$199.71</b>		<b>\$132.92</b>	<b>\$268.37</b>	<b>\$63.61</b>	
Overhead Costs per Acre						
Hired Labor	8.51		6.42	13.65	4.55	
Machinery & Building Leases	3.59		4.77	4.82		
Farm Insurance	3.46		3.01	3.95	3.06	
Utilities	2.02		1.69	2.76	1.50	
Dues and Professional Fees	1.63		1.24	1.70	0.72	
Interest on Term Loans	3.56		2.53	3.45	2.18	
Machinery and Building Depr.	14.61		11.48	28.17	7.02	
Miscellaneous Farm Expenses	3.81		2.70	4.45	3.36	
<b>Total Overhead Costs per Acre</b>	<b>\$41.19</b>		<b>\$33.84</b>	<b>\$62.95</b>	<b>\$22.39</b>	
<b>Total Listed Costs per Acre</b>	<b>\$263.25</b>		<b>\$282.25</b>	<b>\$387.12</b>	<b>\$200.31</b>	
<b>Net Return per Acre</b>	<b>\$158.52</b>		<b>\$99.08</b>	<b>\$205.42</b>	<b>\$41.22</b>	
Government Payments per Acre	9.61		9.75	9.55	9.68	
<b>Net Return with Gov. Payments</b>	<b>\$168.13</b>		<b>\$108.83</b>	<b>\$214.97</b>	<b>\$50.90</b>	
Labor & Management Charge	25.97		24.89	38.70	20.82	
<b>Net Return over Labor &amp; Mngt.</b>	<b>\$142.16</b>		<b>\$83.94</b>	<b>\$176.27</b>	<b>\$30.08</b>	
Total Direct Costs per Bu/Cwt	3.52		18.71	3.56	10.13	
<b>Total Listed Costs per Bu/Cwt</b>	<b>4.17</b>		<b>21.25</b>	<b>4.25</b>	<b>11.41</b>	
Listed Costs per Bu/Cwt Less Government Payments	4.00		19.42	4.11	10.56	
Costs per bu/Cwt Less Gov. Payments, Other Income & Labor & Management Charge	4.41		21.29	4.54	11.74	
Machinery Cost per Acre	62.68		64.91	102.22	41.46	
Estimated Labor Hours per Acre	1.28		1.23	1.94	1.09	



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	Soybeans	Sunflowers, Confectionary	Sunflowers, Oil	Wheat, Durum	Wheat, Hard Red Spring	Wheat, Hard Red Winter
Number of Fields	70		31	31	171	39
Number of Farms	32		16	8	53	15
Acres	167.4		119.06	114.16	143.35	113.19
Yield per Acres (bu or cwt)	30.15		18.97	37.27	41.28	59.07
Value per bushel/cwt	\$13.92		\$26.21	\$7.93	\$8.04	\$7.56
Other Product Return per Acre			\$0.06			\$0.48
Total Product Return per Acre	\$419.64		\$497.30	\$295.60	\$331.75	\$446.86
Crop Insurance, LDP & Other Income	\$22.91			\$22.50	\$5.97	\$3.27
Gross Return per Acre	\$442.55		\$497.30	\$318.10	\$337.72	\$450.13
Direct Costs per Acre						
Seed	71.14		39.31	23.03	22.12	17.06
Fertilizer	21.49		49.19	75.50	60.03	63.32
Chemicals	18.99		38.62	33.91	30.70	33.27
Crop Insurance	17.30		19.32	16.40	15.46	16.77
Drying			0.26			
Fuel and Oil	17.03		19.36	15.36	17.21	19.32
Repairs	23.67		24.18	14.83	21.71	17.34
Custom Work	5.17		11.37	12.95	3.69	13.43
Land Rent	40.84		39.72	36.53	40.13	41.48
Operating Interest	4.45		5.05	1.96	3.86	3.08
Miscellaneous Crop Expenses	1.06		0.67	0.15	0.63	0.26
Total Direct Costs per Acre	\$221.14		\$247.05	\$230.62	\$215.54	\$225.33
Return to Overhead per Acre	\$221.41		\$250.25	\$87.48	\$122.18	\$224.80
Overhead Costs per Acre						
Hired Labor	6.18		8.84	3.98	6.50	8.07
Machinery & Building Leases	5.19		0.27	3.29	3.97	5.50
Farm Insurance	4.28		2.95	3.70	3.50	3.03
Utilities	2.91		1.37	1.98	2.20	2.21
Dues and Professional Fees	1.23		1.31	0.58	1.15	2.24
Interest on Term Loans	4.19		2.10	3.38	3.31	3.18
Machinery and Building Depr.	19.37		11.17	18.27	14.58	15.03
Miscellaneous Farm Expenses	2.72		1.87	2.66	2.34	4.17
Total Overhead Costs per Acre	\$46.07		\$29.88	\$37.84	\$37.55	\$43.43
Total Listed Costs per Acre	\$267.21		\$276.93	\$268.46	\$253.09	\$268.76
Net Return per Acre	\$175.34		\$220.37	\$49.64	\$84.63	\$181.37
Government Payments per Acre	10.52		9.26	8.58	10.02	9.79
Net Return with Gov. Payments	\$185.86		\$229.63	\$58.22	\$94.65	\$191.16
Labor & Management Charge	27.34		25.92	24.93	23.03	25.87
Net Return over Labor & Mngt.	\$158.52		\$203.71	\$33.29	\$71.62	\$165.29
Total Direct Costs per Bu/Cwt	7.33		13.02	6.19	5.22	3.81
Total Listed Costs per Bu/Cwt	8.86		14.60	7.20	6.13	4.55
Listed Costs per Bu/Cwt Less Government Payments	7.75		14.11	6.37	5.74	4.32
Costs per bu/Cwt Less Gov. Payments, Other Income & Labor & Management Charge	8.66		15.47	7.04	6.30	4.76
Machinery Cost per Acre	72.57		67.32	67.38	62.78	71.75
Estimated Labor Hours per Acre	1.23		1.54	1.04	1.23	1.34

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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	Corn Silage	Hay, Alfalfa	Hay, Mixed Alfalfa/Grass	Hay, Grass	Hay, Small Grain	Pasture
Number of Fields		21	29	67		114
Number of Farms		14	19	30		39
Acres		45.99	62.58	116.01		282.92
Yield per Acres (tons or AUMs)		2.16	1.8	1.32		0.88
Value per ton or AUM		\$67.11	\$43.85	\$37.91		\$16.19
Other Product Return per Acre		\$0.34				\$0.41
Total Product Return per Acre		\$145.30	\$78.93	\$50.04		\$14.66
Crop Insurance, LDP & Other Income			\$0.07			\$0.09
Gross Return per Acre		\$145.30	\$79.00	\$50.04		\$14.75
Direct Costs per Acre						
Seed						
Fertilizer		3.04				
Chemicals						
Crop Insurance						
Fuel and Oil		9.84	10.38	8.87		0.49
Repairs		12.02	11.87	10.67		0.75
Custom Work						
Land Rent		18.79	13.35	11.92		11.66
Operating Interest		1.92	1.55	1.40		
Miscellaneous Crop Expenses			0.70	0.20		0.31
Total Direct Costs per Acre		\$45.61	\$37.85	\$33.06		\$13.21
<b>Return to Overhead per Acre</b>		<b>\$99.69</b>	<b>\$41.15</b>	<b>\$16.98</b>		<b>\$1.54</b>
Overhead Costs per Acre						
Hired Labor		1.94	1.82	3.53		
Machinery & Building Leases		0.09	0.26			
Farm Insurance		1.95	1.86	1.24		
Utilities		1.97	1.12	0.82		
Dues and Professional Fees		0.30	0.83			
Interest on Term Loans		2.34	2.43	0.73		
Machinery and Building Depr.		8.35	5.59	6.77		0.37
Miscellaneous Farm Expenses		0.76	1.60	1.27		0.68
Total Overhead Costs per Acre		\$17.70	\$15.51	\$14.36		\$1.05
Total Listed Costs per Acre		\$63.31	\$53.36	\$47.42		\$14.26
<b>Net Return per Acre</b>		<b>\$81.99</b>	<b>\$25.64</b>	<b>\$2.62</b>		<b>\$0.49</b>
Government Payments per Acre		1.67	1.42	0.03		0.07
Net Return with Gov. Payments		\$83.66	\$27.06	\$2.65		\$0.56
Labor & Management Charge		10.57	12.38	11.55		0.71
Net Return over Labor & Mngt.		\$73.09	\$14.68	-\$8.90		-\$0.15
Total Direct Costs per Ton/AUM		21.12	21.03	25.05		15.01
<b>Total Listed Costs per Ton/AUM</b>		<b>29.31</b>	<b>29.64</b>	<b>35.92</b>		<b>16.20</b>
Listed Costs per Ton/AUM Less Government Payments		28.38	28.82	35.90		15.56
Costs per Ton/AUM Less Gov. Payments, Other Income & Labor & Management Charge		33.27	35.69	44.65		16.36
Machinery Cost per Acre		31.98	31.07	27.01		1.77
Estimated Labor Hours per Acre		0.80	0.80	0.87		0.05



# Enterprise Analysis Summary for 2012 Livestock

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

	<b>Beef Cow-Calf Average per Cow</b>		<b>Beef Backgrounding Average per CWT Produced</b>	
Number of Farms	29		20	
	Quantity	Value	Quantity	Value
Beef Calves Sold (pounds)	141.70	222.71	281.51	414.57
Transferred Out (pounds)	345.20	528.91	76.07	95.63
Cull Sales (pounds)		162.81		
Other Income		2.13		0.38
Less Purchased (pounds)		-184.80	-3.15	-5.02
Less Transferred In (pounds)		-161.57	-312.26	-480.52
Inventory Change (pounds)	0.00	135.41	57.75	93.95
<b>Gross Margin (Production in pounds)</b>	<b>486.90</b>	<b>\$705.60</b>	<b>99.92</b>	<b>\$118.99</b>
<b>Direct Expenses</b>				
Barley (bushels)			0.14	0.77
Corn (bushels)	0.80	5.02	3.05	17.26
Oats (bushels)			1.25	4.18
Corn & Other Silage (pounds)	2502.60	35.98	413.12	7.73
Hay, Alfalfa (pounds)	659.20	10.80	91.01	1.98
Hay, Grass and Other (pounds)	6953.00	123.89	792.86	13.48
Complete Rations (pounds)	55.80	5.57	158.84	20.29
Protein, Vitamins & Minerals (lbs)	66.50	15.05	2.93	0.98
Pasture (animal unit months)	6.90	103.37	0.26	6.50
Other Feed Stuffs (pounds)	312.80	10.54	21.13	0.22
Veterinary		32.29		
Livestock Supplies		14.81		1.98
Fuel and Oil		30.32		2.73
Repairs		52.80		7.60
Custom Hire		4.83		
Other Direct Expenses		1.08		3.71
Operating Interest		8.42		1.52
<b>Total Direct Costs per Acre</b>		<b>\$454.77</b>		<b>\$90.93</b>
<b>Return Over Direct Expenses</b>		<b>\$250.83</b>		<b>\$28.06</b>
<b>Overhead Expenses</b>				
Hired Labor		12.53		2.26
Machinery & Building Leases				
Farm Insurance		9.14		1.36
Utilities		12.81		1.95
Dues and Professional Fees		2.67		
Interest on Term Loans		8.20		1.45
Machinery and Building Depr.		31.43		4.05
Miscellaneous Farm Expenses		6.36		1.18
<b>Total Overhead Expenses</b>		<b>\$83.14</b>		<b>\$12.25</b>
<b>Total Direct &amp; Overhead Expenses</b>		<b>\$537.91</b>		<b>\$103.18</b>
<b>Net Return</b>		<b>\$167.69</b>		<b>\$15.81</b>
Labor & Management Charge		76.94		10.71
<b>Net Return over Labor &amp; Mngt.</b>		<b>\$90.75</b>		<b>\$5.10</b>
Feed Cost per Cow/Cwt Produced		\$310.22		\$73.39
Weaning Percentage		85.7%		
Average Weaning Weight		530		
Average Daily Gain				1.20
Pounds of Feed per Pound of Gain				15.02
Est. Labor Hours per Cow/Cwt Prod.		5.66		0.72

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# Executive Summary for 2012

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

## Income Statement

Crop Sales	473,838	
Crop Inventory Change	144,556	
Gross Crop Income		618,394
Livestock Sales	74,238	
Livestock Inventory Change	7,941	
Gross Livestock Income		82,179
Government Payments		26,589
Other Cash Farm Income		46,824
Change in Accounts Receivable		13,507
Gain or Loss on Hedging Accts.		-312
Change in Other Assets		-709
Gain or Loss on Breeding Lvst.		-3,387
<b>Gross Farm Income</b>		<b>783,085</b>
Cash Operating Expense	454,676	
Change in Prepaid Exp. & Sup.	-7,868	
Change in Growing Crops	-4,978	
Change in Accounts Payable	5,038	
Depreciation	35,166	
Total Operating Expense		482,034
Interest Paid	36,098	
Change in Accrued Interest	3,328	
Total Interest Expense		39,426
<b>Total Expenses</b>		<b>521,460</b>
<b>Net Farm Income from Operations</b>		<b>261,625</b>
Gain or Loss on Capital Sales		-1,490
<b>Net Farm Income</b>		<b>260,135</b>
Change in Earned Net Worth	235,560	20.8%

## Financial Standards Measures

<b>Liquidity</b>	<b>Beginning</b>	<b>Ending</b>
Current Ratio	2.51	2.30
Working Capital	259,157	339,364
Working Capital to Gross Rev.		42.8%
<b>Solvency (Cost)</b>	<b>Beginning</b>	<b>Ending</b>
Debt to Asset Ratio	32.7%	33.7%
Equity to Asset Ratio	65.4%	64.0%
Debt to Equity	52.9%	56.3%
<b>Profitability</b>		<b>Cost</b>
Rate of Return on Assets		14.0%
Rate of Return on Equity		19.4%
Operating Profit Margin		29.5%
Net Farm Income		261,625
EBITDA		320,667
<b>Repayment Capacity</b>		
Capital Debt Repayment Cap.		276,312
Capital Debt Repayment Margin		203,317
Replacement Margin		184,539
Term Debt Coverage Ratio		3.79
Replacement Margin Coverage Ratio		3.01
<b>Efficiency</b>		<b>Cost</b>
Asset Turnover Rate		47.4%
Operating Expense Ratio		59.6%
Depreciation Expense Ratio		4.4%
Interest Expense Ratio		3.0%
Net Farm Income Ratio		32.8%



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