

AgriProfit\$

**Cost and Return Profiles for
Selected Crops, 2001
*Black Soil Zone***

August, 2005

Alberta
AGRICULTURE, FOOD AND
RURAL DEVELOPMENT



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2001 Black Soil Zone

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OVERVIEW

2001 Black and Thin Black Soil Zones

The AgriProfit\$ Cost and Return study is a provincial overview of costs and returns for various annual field crops and forages grown throughout the province. Participating farmers are surveyed throughout the winter and the Alberta Agriculture Economics Unit compiles all the information into this summary package. This detailed and world-class database is used for extension and research purposes.

In this package you will find a brief summary of various field crops and forages grown in the black and thin black soil zones. Where numbers warrant, there are two levels of analysis – the group average and the top third. The top third analysis is based on the top third of fields that have the highest return to equity.

The map on the upper right illustrates the Black and Thin Black Soil Zone areas of Alberta. Please note that farms highlighted within this zone may contain characteristics of neighbouring soil zones, however, this is the grouping method used for this study.

The map on the lower right highlights the locations of participating farmers for the 2001 program season.

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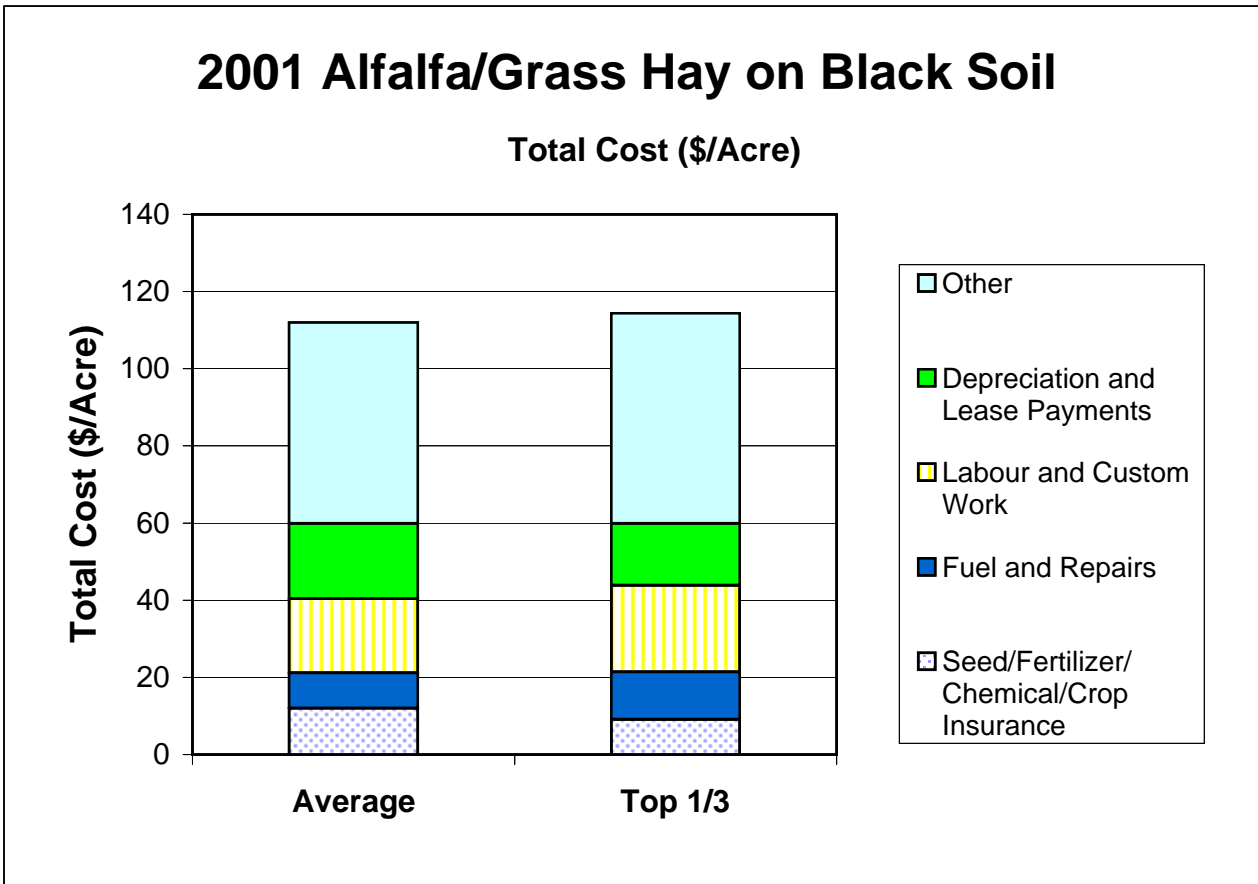
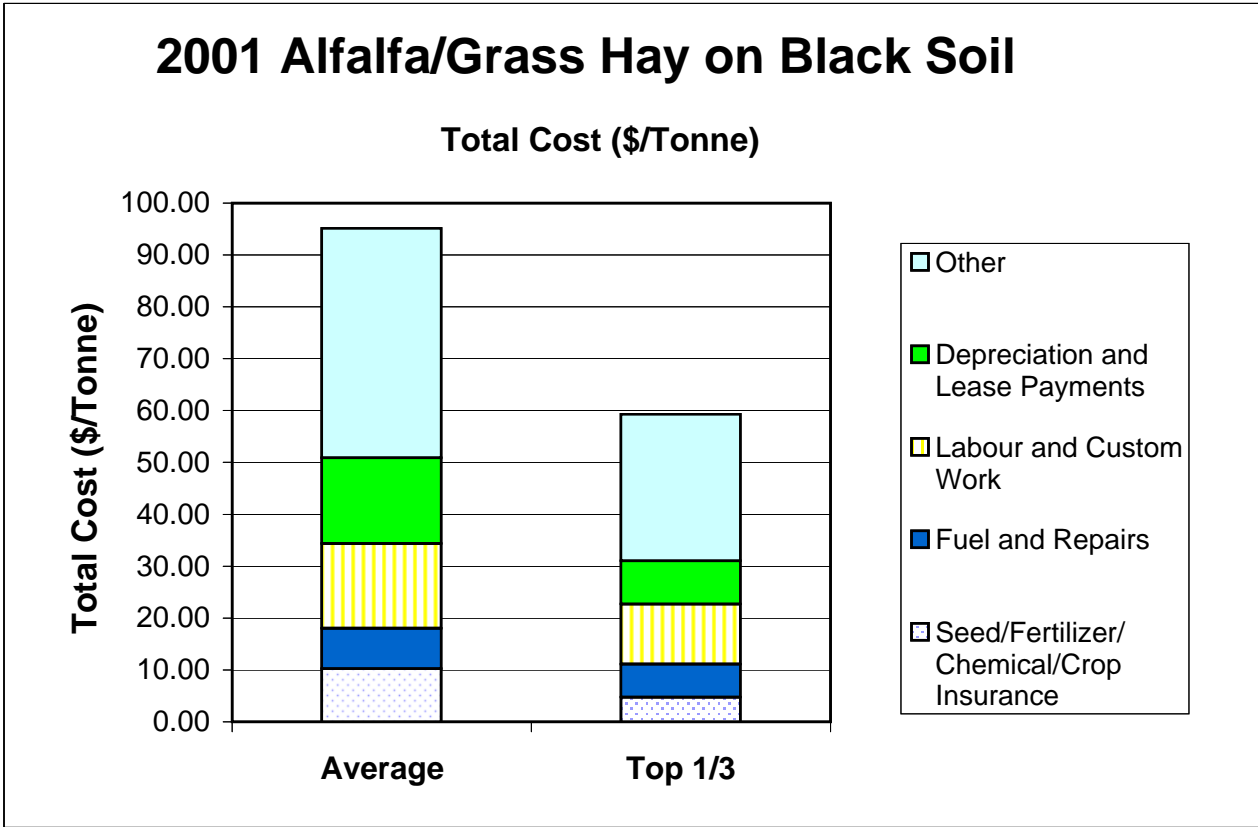
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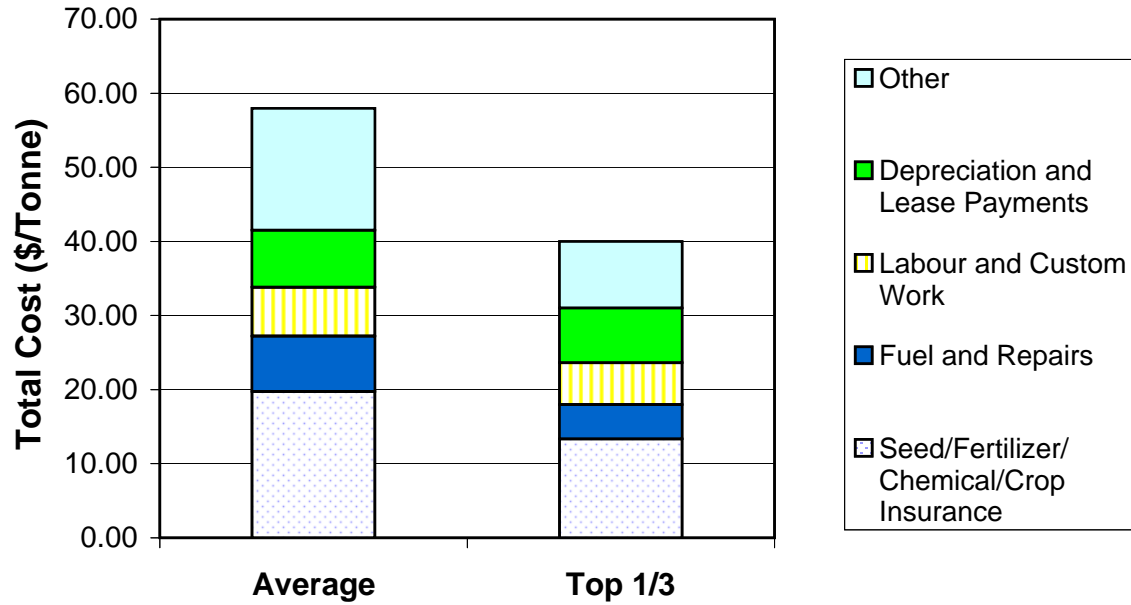


2001 Participant Map coming soon



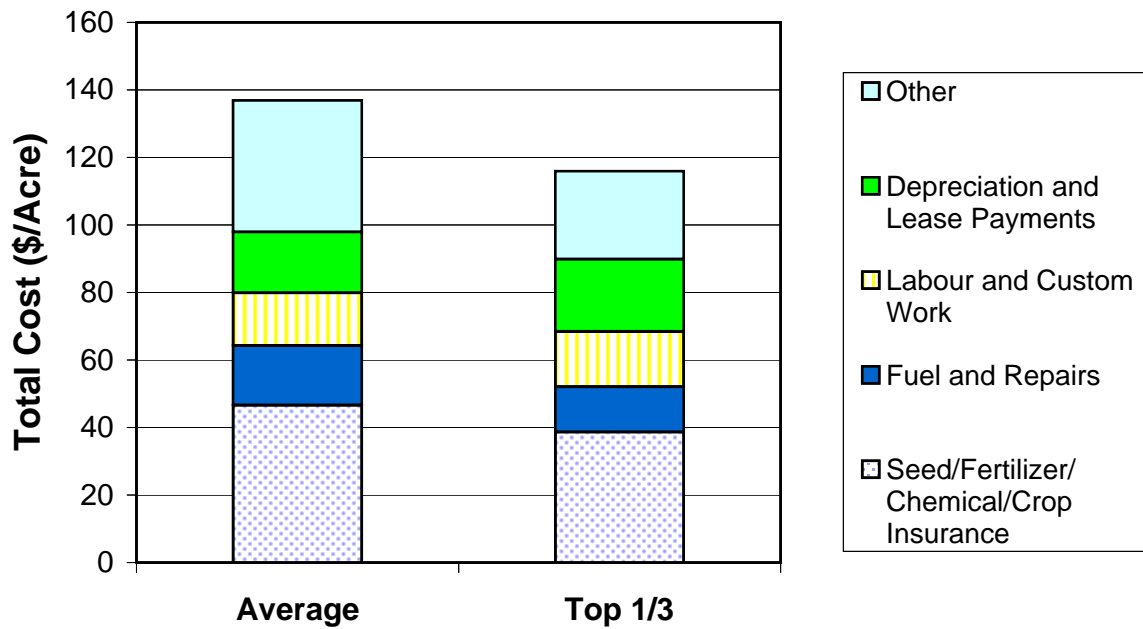
2001 Greenfeed on Black Soil

Total Cost (\$/Tonne)



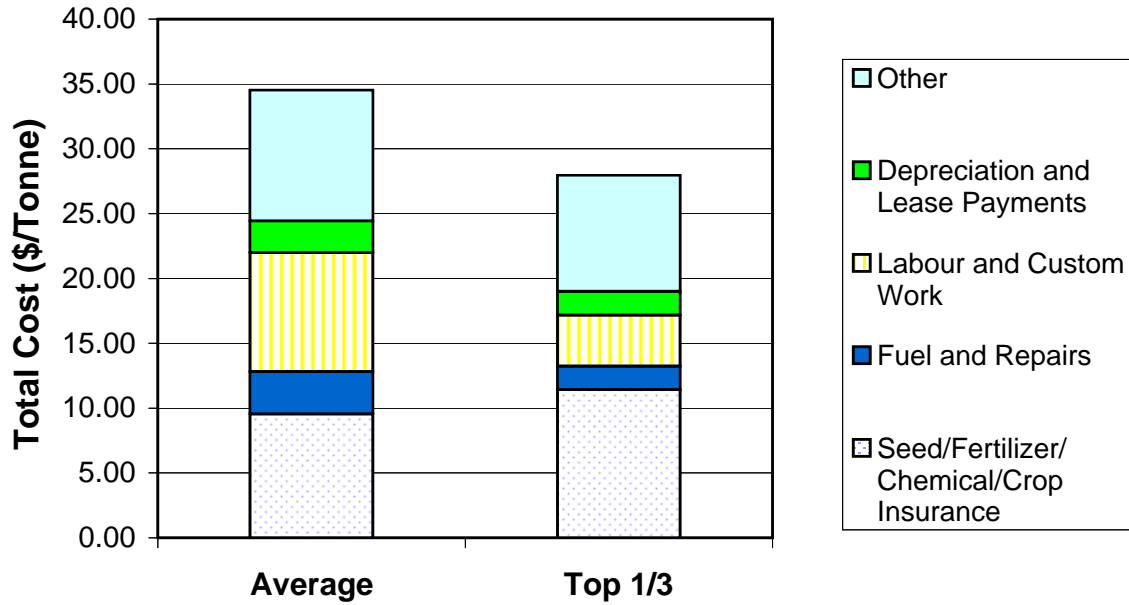
2001 Greenfeed on Black Soil

Total Cost (\$/Acre)



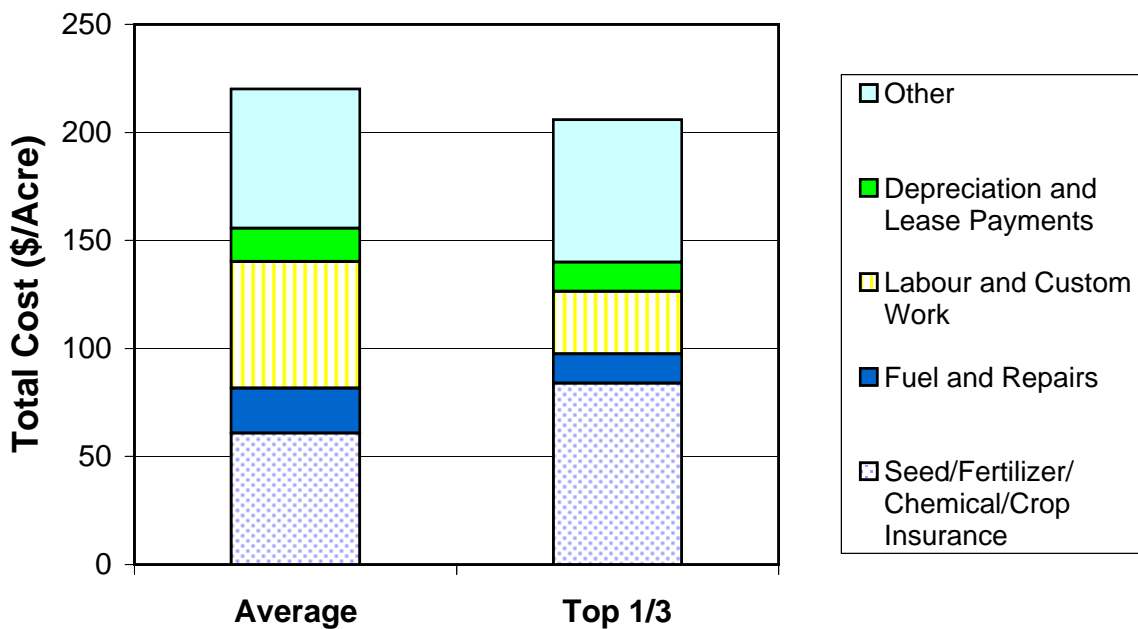
2001 Grain Silage on Black Soil

Total Cost (\$/Tonne)



2001 Grain Silage on Black Soil

Total Cost (\$/Acre)



2001 Crop Enterprise Analysis

AgriProfit\$

Crop: *CPS Wheat - All*
Soil Zone: *Black - Dryland*
Unit: *Bushel*

		----- \$/Acre -----		----- \$/Bushel -----	
		Average	Top 1/3	Average	Top 1/3
(A)	1. Crop Sales	245.71	--	3.84	--
	2. Crop Insurance Receipts	11.73	--	0.18	--
	3. Other Receipts	22.12	--	0.35	--
	Gross Receipts	279.57	0.00	4.36	0.00
(B)	Cost Items				
	1. Seed	12.63	--	0.20	--
	2. Fertilizer	46.83	--	0.73	--
	3. Chemical	32.21	--	0.50	--
	4. Hail/Crop Insurance Premium	11.86	--	0.19	--
	5. Trucking and Marketing	3.81	--	0.06	--
	6. Fuel	7.00	--	0.11	--
	7. Irrigation Fuel and Electricity	0.00	--	0.00	--
	8. Repairs - Machinery	6.20	--	0.10	--
	9. Repairs - Buildings	0.47	--	0.01	--
	10. Utilities and Miscellaneous	5.34	--	0.08	--
	11. Custom Work	13.26	--	0.21	--
	12. Operating Interest Paid	10.66	--	0.17	--
	13. Paid Labour	1.10	--	0.02	--
	14. Unpaid Labour	7.13	--	0.11	--
	Variable Costs	158.50	0.00	2.47	0.00
(C)	1. Cash/ Share Land Rent	24.28	--	0.38	--
	2. Taxes, Water Rates, License & Ins.	1.99	--	0.03	--
	3. Equipment and Building: a) Depreciation	17.41	--	0.27	--
	b) Lease Payments	7.37	--	0.12	--
	4. Paid Capital Interest	4.49	--	0.07	--
	Capital Costs	55.54	0.00	0.87	0.00
(D)	Cash Costs	(B+C-B14-C3a)	189.50	--	2.96
(E)	Total Production Costs	(B+C)	214.04	--	3.34
	Gross Margin	(A-D)	90.07	--	1.41
	Return to Unpaid Labour	(A-E+B14)	72.66	--	1.13
	Return to Investment	(A-E+C4)	70.02	--	1.09
	Return to Equity	(A-E)	65.53	--	1.02

Investment

Buildings	115.61	--
Machinery	134.86	--
Irrigation Machinery	0.00	--
Total (incl. Land)	332.71	--

Management

Average Yield	(Bushel/acre)	64.07	--
Expected Market Price	(\$/Bushel)	3.84	--

2001 Crop Enterprise Analysis

AgriProfit®

Crop: Oats - All
Soil Zone: Black - Dryland
Unit: Bushel

		-----\$/Acre-----		-----\$/Bushel-----	
		Average	Top 1/3	Average	Top 1/3
(A)	1. Crop Sales	210.89	--	2.40	--
	2. Crop Insurance Receipts	23.15	--	0.26	--
	3. Other Receipts	23.75	--	0.27	--
	Gross Receipts	257.79	0.00	2.94	0.00
(B)	Cost Items				
	1. Seed	9.71	--	0.11	--
	2. Fertilizer	35.39	--	0.40	--
	3. Chemical	4.85	--	0.06	--
	4. Hail/Crop Insurance Premium	3.57	--	0.04	--
	5. Trucking and Marketing	4.68	--	0.05	--
	6. Fuel	11.88	--	0.14	--
	7. Irrigation Fuel and Electricity	0.00	--	0.00	--
	8. Repairs - Machinery	16.72	--	0.19	--
	9. Repairs - Buildings	0.48	--	0.01	--
	10. Utilities and Miscellaneous	3.74	--	0.04	--
	11. Custom Work	0.91	--	0.01	--
	12. Operating Interest Paid	11.37	--	0.13	--
	13. Paid Labour	3.96	--	0.05	--
	14. Unpaid Labour	13.05	--	0.15	--
	Variable Costs	120.33	0.00	1.37	0.00
(C)	1. Cash/ Share Land Rent	34.98	--	0.40	--
	2. Taxes, Water Rates, License & Ins.	3.05	--	0.03	--
	3. Equipment and Building: a) Depreciation	22.32	--	0.25	--
	b) Lease Payments	7.58	--	0.09	--
4. Paid Capital Interest	7.74	--	0.09	--	
	Capital Costs	75.67	0.00	0.86	0.00
(D)	Cash Costs	(B+C-B14-C3a)	160.62	--	1.83
(E)	Total Production Costs	(B+C)	196.00	--	2.23
	Gross Margin	(A-D)	97.17	--	1.11
	Return to Unpaid Labour	(A-E+B14)	74.85	--	0.85
	Return to Investment	(A-E+C4)	69.53	--	0.79
	Return to Equity	(A-E)	61.80	--	0.70

Investment

Buildings	57.98	--
Machinery	223.88	--
Irrigation Machinery	0.00	--
Total (incl. Land)	536.87	--

Management

Average Yield	(Bushel/acre)	87.79	--
Expected Market Price	(\$/Bushel)	2.40	--

2001 Crop Enterprise Analysis

AgriProfit\$

Crop: Oats - Rent
Soil Zone: Black - Dryland
Unit: Bushel

		-----\$/Acre-----		-----\$/Bushel-----	
		Average	Top 1/3	Average	Top 1/3
(A)	1. Crop Sales	224.80	--	2.64	--
	2. Crop Insurance Receipts	32.72	--	0.38	--
	3. Other Receipts	22.21	--	0.26	--
Gross Receipts		279.73	0.00	3.29	0.00
(B)	Cost Items				
	1. Seed	10.11	--	0.12	--
	2. Fertilizer	35.89	--	0.42	--
	3. Chemical	1.60	--	0.02	--
	4. Hail/Crop Insurance Premium	4.66	--	0.05	--
	5. Trucking and Marketing	4.41	--	0.05	--
	6. Fuel	5.97	--	0.07	--
	7. Irrigation Fuel and Electricity	0.00	--	0.00	--
	8. Repairs - Machinery	12.96	--	0.15	--
	9. Repairs - Buildings	0.68	--	0.01	--
	10. Utilities and Miscellaneous	3.86	--	0.05	--
	11. Custom Work	1.28	--	0.02	--
	12. Operating Interest Paid	15.42	--	0.18	--
	13. Paid Labour	3.33	--	0.04	--
	14. Unpaid Labour	10.06	--	0.12	--
Variable Costs		110.23	0.00	1.30	0.00
(C)	1. Cash/ Share Land Rent	49.43	--	0.58	--
	2. Taxes, Water Rates, License & Ins.	0.60	--	0.01	--
	3. Equipment and Building: a) Depreciation	16.78	--	0.20	--
	b) Lease Payments	10.72	--	0.13	--
	4. Paid Capital Interest	4.03	--	0.05	--
Capital Costs		81.56	0.00	0.96	0.00
(D)	Cash Costs	(B+C-B14-C3a)	164.95	--	1.94
(E)	Total Production Costs	(B+C)	191.79	--	2.25
	Gross Margin	(A-D)	114.78	--	1.35
	Return to Unpaid Labour	(A-E+B14)	98.00	--	1.15
	Return to Investment	(A-E+C4)	91.97	--	1.08
	Return to Equity	(A-E)	87.94	--	1.03

Investment

Buildings	40.40	--
Machinery	173.09	--
Irrigation Machinery	0.00	--
Total (incl. Land)	213.49	--

Management

Average Yield	(Bushel/acre)	85.11	--
Expected Market Price	(\$/Bushel)	2.64	--

2001 Crop Enterprise Analysis

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Crop: *Roundup Ready Canola - All*
Soil Zone: *Black - Dryland*
Unit: *Bushel*

		----- \$/Acre -----		----- \$/Bushel -----	
		Average	Top 1/3	Average	Top 1/3
(A)	1. Crop Sales	271.37	--	7.49	--
	2. Crop Insurance Receipts	7.13	--	0.20	--
	3. Other Receipts	2.27	--	0.06	--
Gross Receipts		280.77	0.00	7.75	0.00
(B)	Cost Items				
	1. Seed	41.85	--	1.16	--
	2. Fertilizer	45.11	--	1.25	--
	3. Chemical	9.29	--	0.26	--
	4. Hail/Crop Insurance Premium	8.70	--	0.24	--
	5. Trucking and Marketing	4.30	--	0.12	--
	6. Fuel	5.26	--	0.15	--
	7. Irrigation Fuel and Electricity	0.00	--	0.00	--
	8. Repairs - Machinery	12.46	--	0.34	--
	9. Repairs - Buildings	0.69	--	0.02	--
	10. Utilities and Miscellaneous	3.19	--	0.09	--
	11. Custom Work	8.66	--	0.24	--
	12. Operating Interest Paid	15.77	--	0.44	--
	13. Paid Labour	3.30	--	0.09	--
	14. Unpaid Labour	9.89	--	0.27	--
Variable Costs		168.46	0.00	4.65	0.00
(C)	1. Cash/ Share Land Rent	31.25	--	0.86	--
	2. Taxes, Water Rates, License & Ins.	1.48	--	0.04	--
	3. Equipment and Building: a) Depreciation	16.18	--	0.45	--
	b) Lease Payments	10.96	--	0.30	--
	4. Paid Capital Interest	13.14	--	0.36	--
Capital Costs		73.01	0.00	2.02	0.00
(D)	Cash Costs	(B+C-B14-C3a)	215.40	--	5.95
(E)	Total Production Costs	(B+C)	241.47	--	6.67
	Gross Margin	(A-D)	65.36	--	1.80
	Return to Unpaid Labour	(A-E+B14)	49.18	--	1.36
	Return to Investment	(A-E+C4)	52.43	--	1.45
	Return to Equity	(A-E)	39.29	--	1.08

Investment

Buildings	38.07	--
Machinery	167.43	--
Irrigation Machinery	0.00	--
Total (incl. Land)	380.50	--

Management

Average Yield	(Bushel/acre)	36.23	--
Expected Market Price	(\$/Bushel)	7.49	--

2001 Crop Enterprise Analysis

AgriProfit\$

Crop: *Alfalfa Hay - All*
 Soil Zone: *Black - Dryland*
 Unit: *Tonne*

		-----\$/Acre-----		-----\$/Tonne-----	
		Average	Top 1/3	Average	Top 1/3
(A)	1. Crop Sales	147.39	--	102.39	--
	2. Crop Insurance Receipts	0.00	--	0.00	--
	3. Other Receipts	0.42	--	0.29	--
Gross Receipts		147.80	0.00	102.68	0.00
(B)	Cost Items				
	1. Seed	0.00	--	0.00	--
	2. Fertilizer	5.38	--	3.74	--
	3. Chemical	0.00	--	0.00	--
	4. Hail/Crop Insurance Premium	0.00	--	0.00	--
	5. Trucking and Marketing	0.10	--	0.07	--
	6. Fuel	2.76	--	1.92	--
	7. Irrigation Fuel and Electricity	0.00	--	0.00	--
	8. Repairs - Machinery	2.34	--	1.63	--
	9. Repairs - Buildings	0.03	--	0.02	--
	10. Utilities and Miscellaneous	2.92	--	2.03	--
	11. Custom Work	3.01	--	2.09	--
	12. Operating Interest Paid	4.43	--	3.08	--
	13. Paid Labour	3.05	--	2.12	--
	14. Unpaid Labour	8.67	--	6.03	--
Variable Costs		32.70	0.00	22.72	0.00
(C)	1. Cash/ Share Land Rent	26.76	--	18.59	--
	2. Taxes, Water Rates, License & Ins.	3.51	--	2.44	--
	3. Equipment and Building: a) Depreciation	12.66	--	8.79	--
	b) Lease Payments	1.50	--	1.04	--
	4. Paid Capital Interest	5.77	--	4.01	--
Capital Costs		50.18	0.00	34.86	0.00
(D)	Cash Costs	61.56	--	42.76	--
(E)	Total Production Costs	82.88	--	57.58	--
	Gross Margin	86.25	--	59.92	--
	Return to Unpaid Labour	73.59	--	51.13	--
	Return to Investment	70.68	--	49.11	--
	Return to Equity	64.92	--	45.10	--

Investment

Buildings	4.45	--
Machinery	126.13	--
Irrigation Machinery	0.00	--
Total (incl. Land)	408.79	--

Management

Average Yield	(Tonne/acre)	1.44	--
Expected Market Price	(\$/Tonne)	102.39	--

2001 Crop Enterprise Analysis

AgriProfit\$

Crop: *Alfalfa Hay - Rent*
 Soil Zone: *Black - Dryland*
 Unit: *Tonne*

		-----\$/Acre-----		-----\$/Tonne-----	
		Average	Top 1/3	Average	Top 1/3
(A)	1. Crop Sales	110.10	--	107.90	--
	2. Crop Insurance Receipts	0.00	--	0.00	--
	3. Other Receipts	0.25	--	0.24	--
	Gross Receipts	110.35	0.00	108.14	0.00
(B)	Cost Items				
	1. Seed	0.00	--	0.00	--
	2. Fertilizer	10.24	--	10.04	--
	3. Chemical	0.00	--	0.00	--
	4. Hail/Crop Insurance Premium	0.00	--	0.00	--
	5. Trucking and Marketing	0.00	--	0.00	--
	6. Fuel	2.20	--	2.16	--
	7. Irrigation Fuel and Electricity	0.00	--	0.00	--
	8. Repairs - Machinery	2.62	--	2.56	--
	9. Repairs - Buildings	0.06	--	0.06	--
	10. Utilities and Miscellaneous	2.69	--	2.64	--
	11. Custom Work	5.35	--	5.24	--
	12. Operating Interest Paid	5.92	--	5.80	--
	13. Paid Labour	3.78	--	3.71	--
	14. Unpaid Labour	6.90	--	6.77	--
	Variable Costs	39.76	0.00	38.97	0.00
(C)	1. Cash/ Share Land Rent	50.90	--	49.88	--
	2. Taxes, Water Rates, License & Ins.	2.98	--	2.92	--
	3. Equipment and Building: a) Depreciation	10.89	--	10.67	--
	b) Lease Payments	2.84	--	2.79	--
	4. Paid Capital Interest	0.49	--	0.48	--
	Capital Costs	68.10	0.00	66.74	0.00
(D)	Cash Costs	(B+C-B14-C3a)	90.08	--	88.28
(E)	Total Production Costs	(B+C)	107.87	--	105.71
	Gross Margin	(A-D)	20.27	--	19.86
	Return to Unpaid Labour	(A-E+B14)	9.38	--	9.20
	Return to Investment	(A-E+C4)	2.97	--	2.91
	Return to Equity	(A-E)	2.48	--	2.43

Investment

Buildings	2.92	--
Machinery	115.97	--
Irrigation Machinery	0.00	--
Total (incl. Land)	118.89	--

Management

Average Yield	(Tonne/acre)	1.02	--
Expected Market Price	(\$/Tonne)	107.90	--

2001 Crop Enterprise Analysis

AgriProfit\$

Crop: *Alfalfa/Grass Hay - All*
Soil Zone: *Black - Dryland*
Unit: *Tonne*

		-----\$/Acre-----		-----\$/Tonne-----	
		Average	Top 1/3	Average	Top 1/3
(A)	1. Crop Sales	134.99	215.17	114.69	111.49
	2. Crop Insurance Receipts	0.00	0.00	0.00	0.00
	3. Other Receipts	6.34	9.29	5.38	4.81
Gross Receipts		141.33	224.46	120.07	116.31
(B)	Cost Items				
	1. Seed	0.00	0.00	0.00	0.00
	2. Fertilizer	7.62	9.11	6.48	4.72
	3. Chemical	4.43	0.00	3.76	0.00
	4. Hail/Crop Insurance Premium	0.00	0.00	0.00	0.00
	5. Trucking and Marketing	0.03	0.00	0.02	0.00
	6. Fuel	3.08	2.60	2.61	1.35
	7. Irrigation Fuel and Electricity	0.00	0.00	0.00	0.00
	8. Repairs - Machinery	5.79	8.91	4.92	4.62
	9. Repairs - Buildings	0.25	0.81	0.22	0.42
	10. Utilities and Miscellaneous	4.12	6.34	3.50	3.29
	11. Custom Work	9.07	11.71	7.71	6.07
	12. Operating Interest Paid	4.64	7.59	3.94	3.94
	13. Paid Labour	2.80	4.96	2.38	2.57
	14. Unpaid Labour	7.37	5.73	6.26	2.97
Variable Costs		49.20	57.77	41.80	29.94
(C)	1. Cash/ Share Land Rent	30.13	22.46	25.60	11.64
	2. Taxes, Water Rates, License & Ins.	3.80	4.96	3.23	2.57
	3. Equipment and Building: a) Depreciation	17.59	13.16	14.94	6.82
	b) Lease Payments	1.91	2.86	1.63	1.48
	4. Paid Capital Interest	9.34	13.14	7.94	29.32
Capital Costs		62.78	56.59	53.34	51.84
(D)	Cash Costs (B+C-B14-C3a)	87.02	95.47	73.93	71.98
(E)	Total Production Costs (B+C)	111.98	114.36	95.14	81.77
	Gross Margin (A-D)	54.31	128.99	46.14	44.32
	Return to Unpaid Labour (A-E+B14)	36.72	115.83	31.19	37.50
	Return to Investment (A-E+C4)	38.69	123.24	32.87	63.86
	Return to Equity (A-E)	29.34	110.10	24.93	34.54

Investment

Buildings	13.67	18.18
Machinery	183.63	137.62
Irrigation Machinery	0.00	0.00
Total (incl. Land)	466.52	799.47

Management

Average Yield	(Tonne/acre)	1.18	1.93
Expected Market Price	(\$/Tonne)	114.69	111.49

2001 Crop Enterprise Analysis

AgriProfit\$

Crop: *Alfalfa/Grass Hay - Own*
 Soil Zone: *Black - Dryland*
 Unit: *Tonne*

		-----\$/Acre-----		-----\$/Tonne-----	
		Average	Top 1/3	Average	Top 1/3
(A)	1. Crop Sales	148.32	--	106.17	--
	2. Crop Insurance Receipts	0.00	--	0.00	--
	3. Other Receipts	12.44	--	8.91	--
Gross Receipts		160.76	0.00	115.08	0.00
(B)	Cost Items				
	1. Seed	0.00	--	0.00	--
	2. Fertilizer	0.00	--	0.00	--
	3. Chemical	1.34	--	0.96	--
	4. Hail/Crop Insurance Premium	0.00	--	0.00	--
	5. Trucking and Marketing	0.00	--	0.00	--
	6. Fuel	3.36	--	2.41	--
	7. Irrigation Fuel and Electricity	0.00	--	0.00	--
	8. Repairs - Machinery	9.75	--	6.98	--
	9. Repairs - Buildings	0.97	--	0.70	--
	10. Utilities and Miscellaneous	4.76	--	3.41	--
	11. Custom Work	1.47	--	1.06	--
	12. Operating Interest Paid	6.11	--	4.37	--
	13. Paid Labour	3.43	--	2.46	--
	14. Unpaid Labour	7.49	--	5.36	--
Variable Costs		38.68	0.00	27.69	0.00
(C)	1. Cash/ Share Land Rent	0.00	--	0.00	--
	2. Taxes, Water Rates, License & Ins.	6.73	--	4.81	--
	3. Equipment and Building: a) Depreciation	19.96	--	14.29	--
	b) Lease Payments	0.69	--	0.50	--
	4. Paid Capital Interest	24.60	--	17.61	--
Capital Costs		51.97	0.00	37.20	0.00
(D)	Cash Costs (B+C-B14-C3a)	63.21	--	45.24	--
(E)	Total Production Costs (B+C)	90.65	--	64.89	--
	Gross Margin (A-D)	97.56	--	69.83	--
	Return to Unpaid Labour (A-E+B14)	77.60	--	55.55	--
	Return to Investment (A-E+C4)	94.71	--	67.79	--
	Return to Equity (A-E)	70.11	--	50.19	--

Investment

Buildings	22.71	--
Machinery	197.37	--
Irrigation Machinery	0.00	--
Total (incl. Land)	1429.36	--

Management

Average Yield	(Tonne/acre)	1.40	--
Expected Market Price	(\$/Tonne)	106.17	--

2001 Crop Enterprise Analysis

AgriProfit\$

Crop: *Alfalfa/Grass Hay - Rent*
Soil Zone: *Black - Dryland*
Unit: *Tonne*

		-----\$/Acre-----		-----\$/Tonne-----	
		Average	Top 1/3	Average	Top 1/3
(A)	1. Crop Sales	131.17	230.03	117.74	113.52
	2. Crop Insurance Receipts	0.00	0.00	0.00	0.00
	3. Other Receipts	4.59	9.00	4.12	4.44
Gross Receipts		135.76	239.02	121.86	117.96
(B)	Cost Items				
	1. Seed	0.00	0.00	0.00	0.00
	2. Fertilizer	9.80	15.00	8.80	7.40
	3. Chemical	5.32	0.00	4.77	0.00
	4. Hail/Crop Insurance Premium	0.00	0.00	0.00	0.00
	5. Trucking and Marketing	0.04	0.00	0.03	0.00
	6. Fuel	2.99	2.60	2.69	1.28
	7. Irrigation Fuel and Electricity	0.00	0.00	0.00	0.00
	8. Repairs - Machinery	4.65	4.13	4.17	2.04
	9. Repairs - Buildings	0.05	0.08	0.04	0.04
	10. Utilities and Miscellaneous	3.94	6.47	3.54	3.19
	11. Custom Work	11.25	17.62	10.10	8.70
	12. Operating Interest Paid	4.22	6.05	3.79	2.99
	13. Paid Labour	2.61	4.00	2.35	1.98
	14. Unpaid Labour	7.34	5.68	6.59	2.80
Variable Costs		52.21	61.64	46.87	30.42
(C)	1. Cash/ Share Land Rent	38.76	39.89	34.79	19.68
	2. Taxes, Water Rates, License & Ins.	2.97	4.60	2.66	2.27
	3. Equipment and Building: a) Depreciation	16.91	9.38	15.18	4.63
	b) Lease Payments	2.26	3.82	2.03	1.88
	4. Paid Capital Interest	4.98	0.17	4.47	28.55
Capital Costs		65.88	57.85	59.13	57.02
(D)	Cash Costs (B+C-B14-C3a)	93.84	104.43	84.23	80.01
(E)	Total Production Costs (B+C)	118.09	119.49	106.00	87.44
	Gross Margin (A-D)	41.92	134.59	37.63	37.95
	Return to Unpaid Labour (A-E+B14)	25.01	125.21	22.45	33.32
	Return to Investment (A-E+C4)	22.64	119.70	20.33	59.07
	Return to Equity (A-E)	17.67	119.53	15.86	30.52

Investment

Buildings	11.09	8.01
Machinery	179.70	107.31
Irrigation Machinery	0.00	0.00
Total (incl. Land)	190.78	115.33

Management

Average Yield	(Tonne/acre)	1.11	2.03
Expected Market Price	(\$/Tonne)	117.74	113.52

2001 Crop Enterprise Analysis

AgriProfit\$

Crop: *Mixed Grass Hay - All*
Soil Zone: *Black - Dryland*
Unit: *Tonne*

		-----\$/Acre-----		-----\$/Tonne-----	
		Average	Top 1/3	Average	Top 1/3
(A)	1. Crop Sales	153.43	--	107.79	--
	2. Crop Insurance Receipts	0.00	--	0.00	--
	3. Other Receipts	2.18	--	1.53	--
Gross Receipts		155.60	0.00	109.32	0.00
(B)	Cost Items				
	1. Seed	0.00	--	0.00	--
	2. Fertilizer	15.99	--	11.24	--
	3. Chemical	0.00	--	0.00	--
	4. Hail/Crop Insurance Premium	0.00	--	0.00	--
	5. Trucking and Marketing	0.00	--	0.00	--
	6. Fuel	3.24	--	2.28	--
	7. Irrigation Fuel and Electricity	0.00	--	0.00	--
	8. Repairs - Machinery	5.15	--	3.62	--
	9. Repairs - Buildings	0.05	--	0.04	--
	10. Utilities and Miscellaneous	4.24	--	2.98	--
	11. Custom Work	13.32	--	9.36	--
	12. Operating Interest Paid	4.40	--	3.09	--
	13. Paid Labour	3.22	--	2.26	--
	14. Unpaid Labour	6.16	--	4.33	--
Variable Costs		55.78	0.00	39.19	0.00
(C)	1. Cash/ Share Land Rent	34.15	--	23.99	--
	2. Taxes, Water Rates, License & Ins.	5.09	--	3.58	--
	3. Equipment and Building: a) Depreciation	13.83	--	9.72	--
	b) Lease Payments	2.44	--	1.71	--
	4. Paid Capital Interest	4.61	--	3.24	--
Capital Costs		60.12	0.00	42.24	0.00
(D)	Cash Costs (B+C-B14-C3a)	95.91	--	67.38	--
(E)	Total Production Costs (B+C)	115.90	--	81.43	--
	Gross Margin (A-D)	59.69	--	41.94	--
	Return to Unpaid Labour (A-E+B14)	45.86	--	32.22	--
	Return to Investment (A-E+C4)	44.31	--	31.13	--
	Return to Equity (A-E)	39.70	--	27.89	--

Investment

Buildings	13.94	--
Machinery	144.33	--
Irrigation Machinery	0.00	--
Total (incl. Land)	548.51	--

Management

Average Yield	(Tonne/acre)	1.42	--
Expected Market Price	(\$/Tonne)	107.79	--

2001 Crop Enterprise Analysis

AgriProfit\$

Crop: *Native/Slough Grass Hay - All*
Soil Zone: *Black - Dryland*
Unit: *Tonne*

		-----\$/Acre-----		-----\$/Tonne-----	
		Average	Top 1/3	Average	Top 1/3
(A)	1. Crop Sales	112.47	--	72.17	--
	2. Crop Insurance Receipts	0.00	--	0.00	--
	3. Other Receipts	7.45	--	4.78	--
Gross Receipts		119.91	0.00	76.95	0.00
(B)	Cost Items				
	1. Seed	0.00	--	0.00	--
	2. Fertilizer	0.00	--	0.00	--
	3. Chemical	0.00	--	0.00	--
	4. Hail/Crop Insurance Premium	0.00	--	0.00	--
	5. Trucking and Marketing	0.00	--	0.00	--
	6. Fuel	3.05	--	1.95	--
	7. Irrigation Fuel and Electricity	0.00	--	0.00	--
	8. Repairs - Machinery	4.09	--	2.63	--
	9. Repairs - Buildings	0.00	--	0.00	--
	10. Utilities and Miscellaneous	3.19	--	2.05	--
	11. Custom Work	0.00	--	0.00	--
	12. Operating Interest Paid	0.24	--	0.15	--
	13. Paid Labour	0.00	--	0.00	--
	14. Unpaid Labour	8.95	--	5.74	--
Variable Costs		19.52	0.00	12.52	0.00
(C)	1. Cash/ Share Land Rent	27.32	--	17.53	--
	2. Taxes, Water Rates, License & Ins.	1.21	--	0.77	--
	3. Equipment and Building: a) Depreciation	24.72	--	15.87	--
	b) Lease Payments	0.00	--	0.00	--
	4. Paid Capital Interest	3.40	--	2.18	--
Capital Costs		56.65	0.00	36.35	0.00
(D)	Cash Costs (B+C-B14-C3a)	42.50	--	27.27	--
(E)	Total Production Costs (B+C)	76.17	--	48.88	--
	Gross Margin (A-D)	77.42	--	49.68	--
	Return to Unpaid Labour (A-E+B14)	52.69	--	33.81	--
	Return to Investment (A-E+C4)	47.15	--	30.25	--
	Return to Equity (A-E)	43.74	--	28.07	--

Investment

Buildings	25.05	--
Machinery	253.01	--
Irrigation Machinery	0.00	--
Total (incl. Land)	466.74	--

Management

Average Yield	(Tonne/acre)	1.56	--
Expected Market Price	(\$/Tonne)	72.17	--

2001 Crop Enterprise Analysis

AgriProfit\$

Crop: *Native/Slough Grass Hay - Rent*
Soil Zone: *Black - Dryland*
Unit: *Tonne*

		-----\$/Acre-----		-----\$/Tonne-----	
		Average	Top 1/3	Average	Top 1/3
(A)	1. Crop Sales	104.30	--	71.75	--
	2. Crop Insurance Receipts	0.00	--	0.00	--
	3. Other Receipts	7.68	--	5.28	--
Gross Receipts		111.98	0.00	77.03	0.00
(B)	Cost Items				
	1. Seed	0.00	--	0.00	--
	2. Fertilizer	0.00	--	0.00	--
	3. Chemical	0.00	--	0.00	--
	4. Hail/Crop Insurance Premium	0.00	--	0.00	--
	5. Trucking and Marketing	0.00	--	0.00	--
	6. Fuel	3.07	--	2.11	--
	7. Irrigation Fuel and Electricity	0.00	--	0.00	--
	8. Repairs - Machinery	4.03	--	2.77	--
	9. Repairs - Buildings	0.00	--	0.00	--
	10. Utilities and Miscellaneous	3.10	--	2.13	--
	11. Custom Work	0.00	--	0.00	--
	12. Operating Interest Paid	0.24	--	0.17	--
	13. Paid Labour	0.00	--	0.00	--
	14. Unpaid Labour	8.94	--	6.15	--
Variable Costs		19.38	0.00	13.33	0.00
(C)	1. Cash/ Share Land Rent	33.67	--	23.16	--
	2. Taxes, Water Rates, License & Ins.	0.88	--	0.60	--
	3. Equipment and Building: a) Depreciation	24.54	--	16.88	--
	b) Lease Payments	0.00	--	0.00	--
	4. Paid Capital Interest	3.18	--	2.19	--
Capital Costs		62.27	0.00	42.84	0.00
(D)	Cash Costs (B+C-B14-C3a)	48.16	--	33.13	--
(E)	Total Production Costs (B+C)	81.64	--	56.16	--
	Gross Margin (A-D)	63.81	--	43.90	--
	Return to Unpaid Labour (A-E+B14)	39.27	--	27.02	--
	Return to Investment (A-E+C4)	33.51	--	23.05	--
	Return to Equity (A-E)	30.33	--	20.87	--

Investment

Buildings	25.29	--
Machinery	250.79	--
Irrigation Machinery	0.00	--
Total (incl. Land)	276.08	--

Management

Average Yield	(Tonne/acre)	1.45	--
Expected Market Price	(\$/Tonne)	71.75	--

2001 Crop Enterprise Analysis

AgriProfit\$

Crop: *Greenfeed - All*
Soil Zone: *Black - Dryland*
Unit: *Tonne*

		-----\$/Acre-----		-----\$/Tonne-----	
		Average	Top 1/3	Average	Top 1/3
(A)	1. Crop Sales	221.23	319.45	93.68	110.23
	2. Crop Insurance Receipts	0.00	0.00	0.00	0.00
	3. Other Receipts	2.77	4.42	1.17	1.52
Gross Receipts		224.00	323.87	94.86	111.75
(B)	Cost Items				
	1. Seed	6.98	7.17	2.96	2.47
	2. Fertilizer	27.48	25.23	11.64	8.70
	3. Chemical	11.66	6.31	4.94	2.18
	4. Hail/Crop Insurance Premium	0.50	0.00	0.21	0.00
	5. Trucking and Marketing	0.19	0.00	0.08	0.00
	6. Fuel	12.65	8.72	5.36	3.01
	7. Irrigation Fuel and Electricity	0.00	0.00	0.00	0.00
	8. Repairs - Machinery	4.97	4.61	2.10	1.59
	9. Repairs - Buildings	0.01	0.04	0.01	0.01
	10. Utilities and Miscellaneous	4.23	5.10	1.79	1.76
	11. Custom Work	4.32	6.98	1.83	2.41
	12. Operating Interest Paid	2.20	3.13	0.93	1.08
	13. Paid Labour	2.23	1.99	0.95	0.69
	14. Unpaid Labour	9.07	7.38	3.84	2.55
Variable Costs		86.49	76.64	36.62	26.45
(C)	1. Cash/ Share Land Rent	22.99	0.00	9.74	0.00
	2. Taxes, Water Rates, License & Ins.	3.46	5.26	1.47	1.81
	3. Equipment and Building: a) Depreciation	17.40	19.54	7.37	6.74
	b) Lease Payments	0.69	1.89	0.29	0.65
	4. Paid Capital Interest	5.79	12.62	2.45	13.56
Capital Costs		50.35	39.30	21.32	22.77
(D)	Cash Costs (B+C-B14-C3a)	110.37	89.03	46.74	39.93
(E)	Total Production Costs (B+C)	136.83	115.95	57.94	49.22
	Gross Margin (A-D)	113.64	234.84	48.12	71.82
	Return to Unpaid Labour (A-E+B14)	96.24	215.30	40.75	65.08
	Return to Investment (A-E+C4)	92.96	220.54	39.37	76.10
	Return to Equity (A-E)	87.17	207.92	36.91	62.54

Investment

Buildings	16.86	16.40
Machinery	172.16	207.29
Irrigation Machinery	0.00	0.00
Total (incl. Land)	815.26	1462.32

Management

Average Yield	(Tonne/acre)	2.36	2.90
Expected Market Price	(\$/Tonne)	93.68	110.23

2001 Crop Enterprise Analysis

AgriProfit\$

Crop: *Greenfeed - Own*
 Soil Zone: *Black - Dryland*
 Unit: *Tonne*

		-----\$/Acre-----		-----\$/Tonne-----	
		Average	Top 1/3	Average	Top 1/3
(A)	1. Crop Sales	268.31	--	99.29	--
	2. Crop Insurance Receipts	0.00	--	0.00	--
	3. Other Receipts	4.41	--	1.63	--
Gross Receipts		272.72	0.00	100.92	0.00
(B)	Cost Items				
	1. Seed	6.40	--	2.37	--
	2. Fertilizer	27.86	--	10.31	--
	3. Chemical	14.58	--	5.40	--
	4. Hail/Crop Insurance Premium	0.72	--	0.27	--
	5. Trucking and Marketing	0.00	--	0.00	--
	6. Fuel	10.37	--	3.84	--
	7. Irrigation Fuel and Electricity	0.00	--	0.00	--
	8. Repairs - Machinery	4.99	--	1.85	--
	9. Repairs - Buildings	0.03	--	0.01	--
	10. Utilities and Miscellaneous	5.36	--	1.98	--
	11. Custom Work	4.73	--	1.75	--
	12. Operating Interest Paid	2.12	--	0.79	--
	13. Paid Labour	1.81	--	0.67	--
	14. Unpaid Labour	7.19	--	2.66	--
Variable Costs		86.16	0.00	31.88	0.00
(C)	1. Cash/ Share Land Rent	0.00	--	0.00	--
	2. Taxes, Water Rates, License & Ins.	5.49	--	2.03	--
	3. Equipment and Building: a) Depreciation	18.48	--	6.84	--
	b) Lease Payments	1.28	--	0.47	--
	4. Paid Capital Interest	8.91	--	3.30	--
Capital Costs		34.16	0.00	12.64	0.00
(D)	Cash Costs	(B+C-B14-C3a)	94.66	--	35.03
(E)	Total Production Costs	(B+C)	120.32	--	44.53
	Gross Margin	(A-D)	178.07	--	65.90
	Return to Unpaid Labour	(A-E+B14)	159.59	--	59.06
	Return to Investment	(A-E+C4)	161.32	--	59.70
	Return to Equity	(A-E)	152.40	--	56.40

Investment

Buildings	21.79	--
Machinery	190.11	--
Irrigation Machinery	0.00	--
Total (incl. Land)	1373.69	--

Management

Average Yield	(Tonne/acre)	2.70	--
Expected Market Price	(\$/Tonne)	99.29	--

2001 Crop Enterprise Analysis

AgriProfit\$

Crop: *Greenfeed - Rent*
Soil Zone: *Black - Dryland*
Unit: *Tonne*

		-----\$/Acre-----		-----\$/Tonne-----	
		Average	Top 1/3	Average	Top 1/3
(A)	1. Crop Sales	166.18	--	84.65	--
	2. Crop Insurance Receipts	0.00	--	0.00	--
	3. Other Receipts	0.86	--	0.44	--
Gross Receipts		167.03	0.00	85.09	0.00
(B)	Cost Items				
	1. Seed	7.66	--	3.90	--
	2. Fertilizer	27.03	--	13.77	--
	3. Chemical	8.24	--	4.20	--
	4. Hail/Crop Insurance Premium	0.25	--	0.12	--
	5. Trucking and Marketing	0.41	--	0.21	--
	6. Fuel	15.31	--	7.80	--
	7. Irrigation Fuel and Electricity	0.00	--	0.00	--
	8. Repairs - Machinery	4.95	--	2.52	--
	9. Repairs - Buildings	0.00	--	0.00	--
	10. Utilities and Miscellaneous	2.91	--	1.48	--
	11. Custom Work	3.83	--	1.95	--
	12. Operating Interest Paid	2.29	--	1.17	--
	13. Paid Labour	2.73	--	1.39	--
	14. Unpaid Labour	11.26	--	5.74	--
Variable Costs		86.88	0.00	44.26	0.00
(C)	1. Cash/ Share Land Rent	49.88	--	25.41	--
	2. Taxes, Water Rates, License & Ins.	1.10	--	0.56	--
	3. Equipment and Building: a) Depreciation	16.14	--	8.22	--
	b) Lease Payments	0.00	--	0.00	--
	4. Paid Capital Interest	2.14	--	1.09	--
Capital Costs		69.27	0.00	35.29	0.00
(D)	Cash Costs	(B+C-B14-C3a)	128.74	--	65.58
(E)	Total Production Costs	(B+C)	156.14	--	79.54
	Gross Margin	(A-D)	38.29	--	19.51
	Return to Unpaid Labour	(A-E+B14)	22.15	--	11.29
	Return to Investment	(A-E+C4)	13.04	--	6.64
	Return to Equity	(A-E)	10.89	--	5.55

Investment

Buildings	11.09	--
Machinery	151.17	--
Irrigation Machinery	0.00	--
Total (incl. Land)	162.26	--

Management

Average Yield	(Tonne/acre)	1.96	--
Expected Market Price	(\$/Tonne)	84.65	--

2001 Crop Enterprise Analysis

AgriProfit\$

Crop: Grain Silage - All
Soil Zone: Black - Dryland
Unit: Tonne

		-----\$/Acre-----		-----\$/Tonne-----	
		Average	Top 1/3	Average	Top 1/3
(A)	1. Crop Sales	221.03	324.67	34.67	44.09
	2. Crop Insurance Receipts	0.00	0.00	0.00	0.00
	3. Other Receipts	1.32	0.40	0.21	0.05
Gross Receipts		222.35	325.07	34.88	44.15
(B)	Cost Items				
	1. Seed	9.71	10.50	1.52	1.43
	2. Fertilizer	42.19	50.94	6.62	6.92
	3. Chemical	7.80	19.00	1.22	2.58
	4. Hail/Crop Insurance Premium	1.18	3.60	0.19	0.49
	5. Trucking and Marketing	0.00	0.00	0.00	0.00
	6. Fuel	8.99	8.70	1.41	1.18
	7. Irrigation Fuel and Electricity	0.00	0.00	0.00	0.00
	8. Repairs - Machinery	10.62	4.65	1.67	0.63
	9. Repairs - Buildings	1.14	0.08	0.18	0.01
	10. Utilities and Miscellaneous	5.41	6.98	0.85	0.95
	11. Custom Work	47.82	19.13	7.50	2.60
	12. Operating Interest Paid	7.63	5.82	1.20	0.79
	13. Paid Labour	4.90	3.88	0.77	0.53
	14. Unpaid Labour	5.86	5.98	0.92	0.81
Variable Costs		153.26	139.27	24.04	18.91
(C)	1. Cash/ Share Land Rent	39.47	47.33	6.19	6.43
	2. Taxes, Water Rates, License & Ins.	3.34	5.78	0.52	0.79
	3. Equipment and Building: a) Depreciation	13.52	9.80	2.12	1.33
	b) Lease Payments	1.93	3.70	0.30	0.50
	4. Paid Capital Interest	8.52	0.00	1.34	9.05
Capital Costs		66.78	66.62	10.48	18.09
(D)	Cash Costs (B+C-B14-C3a)	200.67	190.10	31.48	34.86
(E)	Total Production Costs (B+C)	220.04	205.88	34.52	37.01
	Gross Margin (A-D)	21.68	134.97	3.40	9.28
	Return to Unpaid Labour (A-E+B14)	8.16	125.17	1.28	7.95
	Return to Investment (A-E+C4)	10.83	119.18	1.70	16.19
	Return to Equity (A-E)	2.31	119.18	0.36	7.14

Investment

Buildings	19.60	6.75
Machinery	139.38	112.05
Irrigation Machinery	0.00	0.00
Total (incl. Land)	455.73	563.24

Management

Average Yield	(Tonne/acre)	6.38	7.36
Expected Market Price	(\$/Tonne)	34.67	44.09

2001 Crop Enterprise Analysis

AgriProfit\$

Crop: Grain Silage - Own
Soil Zone: Black - Dryland
Unit: Tonne

		-----\$/Acre-----		-----\$/Tonne-----	
		Average	Top 1/3	Average	Top 1/3
(A)	1. Crop Sales	194.48	--	34.92	--
	2. Crop Insurance Receipts	0.00	--	0.00	--
	3. Other Receipts	3.27	--	0.59	--
Gross Receipts		197.75	0.00	35.51	0.00
(B)	Cost Items				
	1. Seed	12.10	--	2.17	--
	2. Fertilizer	32.88	--	5.90	--
	3. Chemical	2.94	--	0.53	--
	4. Hail/Crop Insurance Premium	0.59	--	0.11	--
	5. Trucking and Marketing	0.00	--	0.00	--
	6. Fuel	9.43	--	1.69	--
	7. Irrigation Fuel and Electricity	0.00	--	0.00	--
	8. Repairs - Machinery	8.49	--	1.52	--
	9. Repairs - Buildings	0.87	--	0.16	--
	10. Utilities and Miscellaneous	5.99	--	1.08	--
	11. Custom Work	61.64	--	11.07	--
	12. Operating Interest Paid	4.76	--	0.86	--
	13. Paid Labour	2.93	--	0.53	--
	14. Unpaid Labour	6.35	--	1.14	--
Variable Costs		148.98	0.00	26.75	0.00
(C)	1. Cash/ Share Land Rent	0.00	--	0.00	--
	2. Taxes, Water Rates, License & Ins.	7.20	--	1.29	--
	3. Equipment and Building: a) Depreciation	13.00	--	2.33	--
	b) Lease Payments	0.62	--	0.11	--
	4. Paid Capital Interest	16.80	--	3.02	--
Capital Costs		37.62	0.00	6.76	0.00
(D)	Cash Costs	(B+C-B14-C3a)	167.25	--	30.03
(E)	Total Production Costs	(B+C)	186.60	--	33.50
	Gross Margin	(A-D)	30.49	--	5.48
	Return to Unpaid Labour	(A-E+B14)	17.49	--	3.14
	Return to Investment	(A-E+C4)	27.95	--	5.02
	Return to Equity	(A-E)	11.15	--	2.00

Investment

Buildings	17.14	--
Machinery	131.34	--
Irrigation Machinery	0.00	--
Total (incl. Land)	1659.35	--

Management

Average Yield	(Tonne/acre)	5.57	--
Expected Market Price	(\$/Tonne)	34.92	--

2001 Crop Enterprise Analysis

AgriProfit\$

Crop: Grain Silage - Rent
Soil Zone: Black - Dryland
Unit: Tonne

		-----\$/Acre-----		-----\$/Tonne-----	
		Average	Top 1/3	Average	Top 1/3
(A)	1. Crop Sales	227.52	331.43	34.62	44.09
	2. Crop Insurance Receipts	0.00	0.00	0.00	0.00
	3. Other Receipts	0.84	0.45	0.13	0.06
Gross Receipts		228.36	331.88	34.75	44.15
(B)	Cost Items				
	1. Seed	9.13	10.21	1.39	1.36
	2. Fertilizer	44.46	54.21	6.77	7.21
	3. Chemical	8.99	22.43	1.37	2.98
	4. Hail/Crop Insurance Premium	1.32	4.14	0.20	0.55
	5. Trucking and Marketing	0.00	0.00	0.00	0.00
	6. Fuel	8.88	7.44	1.35	0.99
	7. Irrigation Fuel and Electricity	0.00	0.00	0.00	0.00
	8. Repairs - Machinery	11.14	4.91	1.70	0.65
	9. Repairs - Buildings	1.20	0.10	0.18	0.01
	10. Utilities and Miscellaneous	5.27	6.80	0.80	0.91
	11. Custom Work	44.44	13.15	6.76	1.75
	12. Operating Interest Paid	8.33	7.48	1.27	1.00
	13. Paid Labour	5.38	4.99	0.82	0.66
	14. Unpaid Labour	5.74	4.99	0.87	0.66
Variable Costs		154.31	140.88	23.48	18.74
(C)	1. Cash/ Share Land Rent	49.11	60.86	7.47	8.10
	2. Taxes, Water Rates, License & Ins.	2.40	5.04	0.37	0.67
	3. Equipment and Building: a) Depreciation	13.65	8.77	2.08	1.17
	b) Lease Payments	2.25	4.76	0.34	0.63
	4. Paid Capital Interest	6.50	0.00	0.99	10.57
Capital Costs		73.91	79.42	11.25	21.13
(D)	Cash Costs (B+C-B14-C3a)	208.83	206.54	31.78	38.04
(E)	Total Production Costs (B+C)	228.22	220.30	34.73	39.87
	Gross Margin (A-D)	19.53	125.34	2.97	6.11
	Return to Unpaid Labour (A-E+B14)	5.88	116.57	0.89	4.94
	Return to Investment (A-E+C4)	6.64	111.58	1.01	14.84
	Return to Equity (A-E)	0.15	111.58	0.02	4.28

Investment

Buildings	20.20	3.86
Machinery	141.34	105.39
Irrigation Machinery	0.00	0.00
Total (incl. Land)	161.54	109.25

Management

Average Yield	(Tonne/acre)	6.57	7.52
Expected Market Price	(\$/Tonne)	34.62	44.09

FREQUENCY AND CUMULATIVE FREQUENCY DISTRIBUTION

Distribution charts organize data into pictures, which is a format that the human processing system (the brain) can better understand. Frequency distributions relate the percentage (or number) of observations falling in a specific range. Cumulative frequency distribution displays the same information as frequency distribution, but it is expressed as a “rate of change” (i.e. the steeper the slope the greater the change). Cumulative frequency also illustrates how many observations lie above or below certain values, rather than only recording the number of items within the intervals.

The frequency information in this benchmark report provides an indication of how crops performed, on a field-by-field basis, within the *AgriProfit\$* pool. Looking forward, this information can be used to evaluate how and why this crop might be included in future cropping plans based on these types of frequencies. In the following discussions, the Alfalfa/Grass Hay frequency distribution charts are used as an example of how to interpret the frequency information.

The first pair of charts provides the distribution of the alfalfa/grass hay yield range in the Black soil zone. From these charts a lot can be interpreted about yield performance:

- The low is greater than 0.25 tonne per acre and the high is greater than 2.25 tonnes per acre, and
- 70% of the alfalfa/grass hay fields in the black soil zone yield between 0.25 and 1.6 tonnes per acre

This detailed information provides a better understanding of yield variability. The average yield is 1.18 tonnes per acre as listed on page 11 of the alfalfa/grass hay analysis. While the average (or mean) is important, consideration of both the mean and variability ultimately sets the stage for good decision-making and management practices.

The second set of graphs focuses on the distribution of cost totals. Understanding these provides a basis for cost control and managing for yield per dollar invested. It is important to look at cash costs for individual field analysis (as an indication of cash flow pressure points). Cash costs include all cash expenses accrued to the production of that crop. Total production costs are important when assessing all crops together for an overall enterprise analysis, relating the longer term cost efficiency of each crop and the combined crop mix. Total production costs include the non-cash elements of unpaid labour and depreciation, in addition to cash costs. Looking at the charts, if the price of hay was \$120 per tonne, then 80% of the fields are covering their cash costs and 60% of the fields are covering their total production costs. In the long run, the best mix of crops would cover total production costs and give a positive net return per acre.

The third set of graphs highlights contribution and gross margins. Contribution margin is the return over variable costs, which are a combination of variable cash and non-cash (unpaid labour) costs. It is the best single indicator of profitability at the individual field level and it is used to compare and select crops to grow regardless of the fields being owned or rented. The first objective in setting up a crop plan is to select crops with a positive contribution margin; this will identify the most profitable crop mix over the long term. Gross margin is the return over total cash costs, which include fixed costs (land rent, taxes, water rights, licenses and capital

interest). It is valuable in predicting each crop's ability to generate cash flow for the year. From a cash flow point of view, the gross margin provides an indication of the crop's ability to contribute to principal payments and operator withdrawals. From a profitability perspective, gross margin is what is leftover to cover the non-cash costs and provide a return on investment.

The final set of graphs shows the distribution of returns to equity, or profit per unit of production. This example shows that 35% of the fields had a loss and 65% of the fields at least broke even. Return to equity can be used to compare the profitability of one crop versus another or one farm enterprise to another in the same industry.

Understanding these concepts in *AgriProfit\$* and evaluating historical performance on a per bushel basis can be very useful for other AAFRD applications. For example, [CropChoice\\$](#) is a tool that combines traditional crop planning with the ability to measure the riskiness of your plan. Producers can then creatively evaluate potential risk management strategies.

Black Soil Zone - Alfalfa/Grass Hay: 2001

