

AgriProfit\$

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

August, 2005

Alberta
AGRICULTURE, FOOD AND
RURAL DEVELOPMENT



TABLE OF CONTENTS

2001 Brown Soil Zone

	Page
OVERVIEW	1
CROPS	
<i>Cereals:</i>	
Spring Wheat	2
<i>Other:</i>	
Summerfallow	3
DEFINITIONS AND ALLOCATIONS	4

OVERVIEW

2001 Brown Soil Zone

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 brown soil zone. 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 Brown Soil Zone area 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 survey season.

For questions regarding this document please contact:

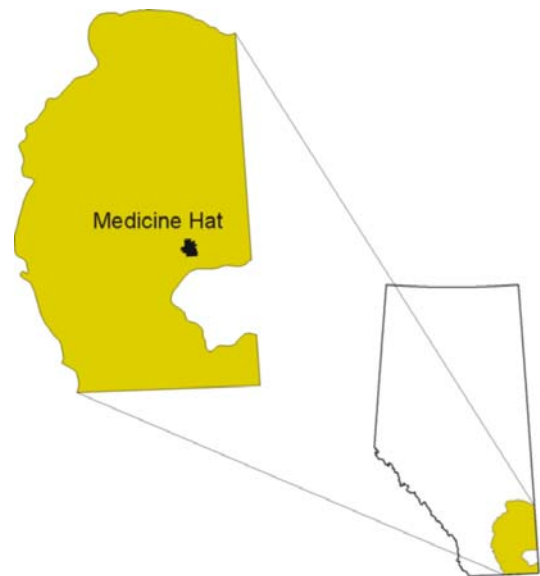
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2001 Participant Map coming soon

2001 Crop Enterprise Analysis

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Crop: **Spring Wheat - All**
 Soil Zone: **Brown - Dryland**
 Unit: **Bushel**

		----- \$/Acre -----		----- \$/Bushel -----	
		Average	Top 1/3	Average	Top 1/3
(A)	1. Crop Sales	72.00	--	6.00	--
	2. Crop Insurance Receipts	68.94	--	5.75	--
	3. Other Receipts	0.10	--	0.01	--
Gross Receipts		141.05	0.00	11.75	0.00
(B)	Cost Items				
	1. Seed	6.00	--	0.50	--
	2. Fertilizer	5.98	--	0.50	--
	3. Chemical	6.41	--	0.53	--
	4. Hail/Crop Insurance Premium	4.40	--	0.37	--
	5. Trucking and Marketing	0.00	--	0.00	--
	6. Fuel	4.35	--	0.36	--
	7. Irrigation Fuel and Electricity	0.00	--	0.00	--
	8. Repairs - Machinery	3.90	--	0.32	--
	9. Repairs - Buildings	1.21	--	0.10	--
	10. Utilities and Miscellaneous	1.88	--	0.16	--
	11. Custom Work	0.00	--	0.00	--
	12. Operating Interest Paid	1.53	--	0.13	--
	13. Paid Labour	0.00	--	0.00	--
	14. Unpaid Labour	8.98	--	0.75	--
Variable Costs		44.63	0.00	3.72	0.00
(C)	1. Cash/ Share Land Rent	7.02	--	0.59	--
	2. Taxes, Water Rates, License & Ins.	2.64	--	0.22	--
	3. Equipment and Building:				
	a) Depreciation	18.61	--	1.55	--
b) Lease Payments	0.00	--	0.00	--	
4. Paid Capital Interest	7.65	--	0.64	--	
Capital Costs		35.93	0.00	2.99	0.00
(D)	Cash Costs	(B+C-B14-C3a)	52.97	--	4.41
(E)	Total Production Costs	(B+C)	80.56	--	6.71
	Gross Margin	(A-D)	88.08	--	7.34
	Return to Unpaid Labour	(A-E+B14)	69.47	--	5.79
	Return to Investment	(A-E+C4)	68.14	--	5.68
	Return to Equity	(A-E)	60.49	--	5.04

Investment

Buildings	0.00	--
Machinery	208.33	--
Irrigation Machinery	0.00	--
Total (incl. Land)	570.59	--

Management

Average Yield	(Bushel/acre)	12.00	--
Expected Market Price	(\$/Bushel)	6.00	--

2001 Crop Enterprise Analysis

Crop: **Summerfallow - All**
 Soil Zone: **Brown - Dryland**
 Unit: **0**

		-----\$/Acre-----	
		Average	Top 1/3
(A)	1. Crop Sales	0.00	--
	2. Crop Insurance Receipts	0.00	--
	3. Other Receipts	0.09	--
Gross Receipts		0.09	0.00
(B)	Cost Items		
	1. Seed	0.00	--
	2. Fertilizer	0.00	--
	3. Chemical	12.45	--
	4. Hail/Crop Insurance Premium	0.00	--
	5. Trucking and Marketing	0.00	--
	6. Fuel	3.10	--
	7. Irrigation Fuel and Electricity	0.00	--
	8. Repairs - Machinery	4.40	--
	9. Repairs - Buildings	1.03	--
	10. Utilities and Miscellaneous	2.35	--
	11. Custom Work	0.00	--
	12. Operating Interest Paid	1.87	--
	13. Paid Labour	0.41	--
	14. Unpaid Labour	5.10	--
Variable Costs		30.71	0.00
(C)	Capital Costs		
	1. Cash/ Share Land Rent	14.22	--
	2. Taxes, Water Rates, License & Ins.	2.45	--
	3. Equipment and Building: a) Depreciation	16.84	--
	b) Lease Payments	2.24	--
	4. Paid Capital Interest	6.76	--
Capital Costs		42.51	0.00
(D)	Cash Costs (B+C-B14-C3a)	51.27	--
(E)	Total Production Costs (B+C)	73.22	--
	Gross Margin (A-D)	(51.18)	--
	Return to Unpaid Labour (A-E+B14)	(68.03)	--
	Return to Investment (A-E+C4)	(66.37)	--
	Return to Equity (A-E)	(73.13)	--

Investment

Buildings	1.48	--
Machinery	191.74	--
Irrigation Machinery	0.00	--
Total (incl. Land)	513.21	--

Management

Average Yield (/acre)	0.00	--
Expected Market Price (\$/)	0.00	--

DEFINITIONS AND ALLOCATIONS

I INCOME

- A Imputed Value of Production** – total of estimated yields/acre X estimated final prices
- B Crop Insurance Receipts** – added regardless of when payment is received
- C Miscellaneous Receipts** – such as patronage dividends or input rebates
- D Government Program Receipts** – allocated to all cropped acres equally
- E Straw/Aftermath Grazing Revenue** – value of straw + imputed value of grazing

II EXPENSES

- A Crop Specific Inputs** – allocated by producer to each crop as documented on the survey form
 - 1. **Seed**
 - 2. **Fertilizer**
 - 3. **Chemical**
 - 4. **Hail and Crop Insurance**
 - 5. **Custom Work and Specialized Labour**
 - 6. **Land Rent** – cash rent or crop share (converted to a cash basis)
- B Allocated Crop Inputs** – allocation ratios based on research from AAFRD
 - 1. **Irrigation to Dryland Ratio** – allocated to crops at a 3:1 ratio
 - 2. **Trucking and Marketing** – allocated to specific cropping acres by producer
 - 3. **Fuel** – Summerfallow – allocation of 0.3:1 compared to crop acres; Sugar beets – allocation of 2.96:1 compared to other irrigated crop acres
 - 4. **Irrigation Fuel** – allocation based on total pumping hours for each crop
 - 5. **Machinery Repairs** – allocated equally to all acres except summerfallow (0.3:1) and special crops (as specified by producer)
 - 6. **Building Repairs** – allocated to all acres equally except for special crops buildings
 - 7. **Operating Interest** – interest paid on operating loans allocated equally
 - 8. **Paid Labour** – based on allocations between crops as specified by producer
 - 9. **Unpaid and Operator Labour** – operator - \$10/hour, other unpaid labour - \$7.50/hour
 - 10. **Land Taxes** – allocated equally to all owned cropped acres
 - 11. **Water Rates** – allocated equally to all owned irrigated acres
 - 12. **Water Rates** – allocated equally to all owned irrigated acres
 - 13. **Equipment Depreciation** – imputed at 8.5% for power equipment, 11% for non-power, based on current market value

- 14. **Insurance and Licenses** – allocated to all cropped acres equally
- 15. **Building Depreciation** – imputed at 5% on the current market value
- 16. **Paid Capital Interest** – allocated to all owned cropped acres equally except summerfallow (0.25:1)

III CAPITAL INVESTMENT

- A Land** – producer estimate of bare land value for both irrigated and dryland owned acreage
- B Buildings** – allocated equally to all acreage except special crops buildings (allocated to the crop)
- C Equipment**
 - 1. **General Use** – allocated to all acres equally, except summerfallow (0.3:1)
 - 2. **Crop Specific** – allocated by producer to each crop based on percentage of use
 - 3. **Irrigation** – allocated according to pumping hours as specified by producer

IV SUMMARY CALCULATION

- A Gross Return** = imputed value of production + crop insurance receipts + miscellaneous receipts + government program payments + straw/grazing revenue
- B Variable Costs** = seed + fertilizer + chemicals + crop insurance + trucking and marketing + fuel + machinery and building repairs + utilities + miscellaneous overhead + custom work + operating interest + paid and unpaid labour
- C Total Capital Costs** = land rent + land taxes + water rates + insurance + depreciation + paid capital interest
- D Cash Costs** = variable costs + capital costs – unpaid labour – depreciation
- E Total Production Costs** = variable costs + total capital costs
- F Gross Margin** (returns left to cover total capital costs and operator equity) = gross return – total cash costs
- G Return to Unpaid Labour** (funds remaining after all expenses have been paid except unpaid labour) = gross return – total production costs + unpaid labour
- H Return to Investment** (shows the operation's ability to earn a return on its total assets) = gross return – total production costs + paid capital interest
- I Return to Equity** (amount remaining from operations used to provide a return to individual or shareholder equity) = gross return – total production costs