

AgriProfit\$

2018 Cropping Alternatives



Economics & Competitiveness





2018 Cropping Alternatives Methodology

Prepared March 12, 2018

Manglai, Economics Section

Disclaimer:

The following regional forecasts are based on the most current cost of production information from the AgriProfit\$ Business Analysis & Research Program and estimates of expected revenues and costs from various sources. Producers should use their own costs and revenue projections to make cropping decisions for farm operations. There is a risk of over or under-estimating costs and returns based on regional benchmarks and forecasts. Producers are advised not to base cropping decisions solely on information provided in the following budgets. The Alberta Agriculture and Forestry crop budgeting software program **CropChoice\$** and the **Crop Budget Calculator** are available to customize your own crop budgets. You can download both CropChoice\$ software and the Crop Budget Calculator free of charge.

Prices:

Expected market prices are estimates ONLY, based on forecasts for the 2018 crop. Prices in these budgets are estimated by Agriculture and Forestry specialists using several price outlook sources including Informa Economics forecasts, and Agriculture and Agri-Food Canada's Market Outlook Reports. Estimated prices are adjusted to reflect location differences and grade factors. Using one's own price estimates from knowledge of area markets and market outlook information is recommended.

Yields:

There is a wide range of yields within each soil zone region. Yield estimates by crop represent average long term trend yields developed by Alberta Financial Services Corporation adjusted upwards by 20% for dryland soil zones and 15% for irrigated zones. For red lentils where long term yields are not available, crop specialist's recommendations have been used.

Seed Costs: (See the following Seeding Rate Table.)

Seed costs are based on data collected by the Alberta Farm Input Prices Survey (AIMS) and seed suppliers as well as a seed cost multiplier for a blend of certified and common seed that is cleaned and treated. Seeding rates for each soil zone are based on 1000 kernel weight for common varieties, 90-95% germination, 3-5% emergence mortality, and 9" spacing. Seeding rates for forages are based on 1000 kernel weight for common varieties, pure live seed and a 50-50 split of broadcasted and row seeded plantings.

Fertilizer Costs:

Prices are based on a combination of the fall 2017 prices, "pre-purchase" prices, and fertilizer cost indications for spring 2018. NPKS blends are based on estimated crop requirements for nutrient deficient, stubble-seeded crops in each soil zone.

Nitrogen	\$0.49/lb actual N	(\$502/tonne for 46-0-0)
Phosphorous	\$0.50/lb actual P	(\$692/tonne for 11-51-0)
Potassium	\$0.32/lb actual K	(\$425/tonne for 0-0-60)
Sulphur	\$0.43/lb actual S	(\$450/tonne for 20-0-0-24)

Soil testing is recommended to optimize the fertilizer budget to field production capacity and crop choice. The Alberta Farm Fertilizer Information and Recommendation Manager (AFFIRM) is an Alberta Agriculture and Forestry software tool that can help producers optimize fertilizer requirements for crop production. Variable rate technology is also an option being used by producers to maximize production to fertilizer and input expenses. In a mature commodity market, managing costs could mean the difference between farm profitability and farm losses.

Chemical: (See the following Chemical Application Table.)

The 2017 chemical costs on stubble-seeded crops include a non-selective, pre-seed burn-off, and one in-crop herbicide application for broadleaf weeds, grassy weeds or both. For red lentils, 2017 chemical costs were used. Feed barley chemical cost is based on 50% of the acres receiving an in-crop herbicide treatment. Fungicides, insecticides and/or pre-harvest/desiccation applications (F/I/PH/D) are indicated by an asterisk *.



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Hail/Crop Insurance:

Insurance is based on information from AFSC averaged for select areas in respective soil zones.

Trucking & Marketing:

For grains and oilseeds, trucking and marketing costs are averages for short haul and long haul rates from cost suppliers. For hay, trucking and marketing costs are estimates from suppliers, assuming bales shipped are 1500 lb and distance hauled is between 50 and 100 kms. For silage, trucking and marketing costs are last year's estimates indexed for the 2018 year.

Fuel, Oil & Lube, Machinery Repairs, Building Repairs, Pumping Costs (Irrigation only), Labour (Paid and Unpaid), Utilities & Miscellaneous, Operating Interest, and Storage and/or Levies:

These costs are based on information collected by the AgriProfit\$ program, the Alberta Farm Input Prices Survey and irrigation specialists. Many of these costs are influenced significantly by differences in regional farming practices.

Operating Interest:

5.05% per annum for inputs financed (seed, fertilizer and chemical).

Contribution Margin:

Contribution margin represents the amount a particular crop contributes to fixed costs, and return to management and equity. Use the contribution margin to compare crop choices.

Capital Costs by Enterprise:

Fixed costs generally do not vary greatly from crop to crop, but can vary between enterprises and soil zone regions. Average fixed cost profiles by enterprise are included for your information. The capital costs are indexed to reflect costs for the 2018 year.

Summerfallow:

The summerfallow column included in the Brown soil zone budget is only provided to reference the expected costs incurred in a non-crop year. Fallow-seeded crops are not included in this analysis because the summerfallow practice has significantly declined. Producers wanting to evaluate fallow-seeded crops can use CropChoice\$ and the Crop Budget Calculator.

Contribution Margin Calculation:

Value of Production - Total Direct Expenses

Total Cost per Unit Calculation:

(Total Direct Expenses + Adjusted Capital Costs) divided by Expected Yield per Acre

Break-Even Yield Calculation:

(Total Direct Expenses + Adjusted Capital Costs) divided by Expected Market Price

Acknowledgements:

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2018 Cropping Alternatives

Seeding Rate by Alberta Soil Zones

	Black			Brown			Dark Brown			Grey-Wooded			Peace Region			Irrigation		
	lbs/ac	bu/ac	\$/ac	lbs/ac	bu/ac	\$/ac	lbs/ac	bu/ac	\$/ac	lbs/ac	bu/ac	\$/ac	lbs/ac	bu/ac	\$/ac	lbs/ac	bu/ac	\$/ac
spring wheat		2.5	33.13		1.75	23.19		2	26.50		2.5	33.13		2	26.50		2.25	29.81
cps wheat		2.5	29.94		1.75	20.96		2	23.95		2.5	29.94		2	23.95		2.25	26.94
durum wheat					1.75	28.19		1.75	28.19								2	32.22
soft white wheat																	2	24.00
winter wheat								2	25.50									
malt barley		2.5	30.46		1.75	21.32		2	24.37		2.5	30.46		2	24.37		2.5	30.46
feed barley		2.5	22.81		1.75	15.97		2	18.25		2.5	22.81		2	18.25		2.5	22.81
milling oats		2.5	20.25		2	16.20		2.25	18.23		2.5	20.25		2	16.20			
argentine canola	5		62.50	4		50.00	5		62.50	5		62.50	4		50.00	5		62.50
polish canola													4		23.00			
field pea		3	45.60		2.75	41.80		2.75	41.80		3	45.60		2.75	41.80			
yellow mustard				10		23.00	10		23.00									
chickpeas				120		72.00												
lentils				60		22.80	60		22.80									
flax							65		0.00									
dry beans																60		49.51
cereal silage		2.5	19.60				2		15.68		2.5	19.60		2	15.68		2.5	19.60
mixed hay	11		3.53	10		3.24	10		3.24	11		3.53	11		3.53			
alfalfa hay	10		10.63							10		12.50	10		12.50	14		17.50

Chemical Application by Alberta Soil Zones


	Black			Brown			Dark Brown			Grey-Wooded			Peace Region (Grey-Wooded)			Irrigation		
	PreSeed	In Crop	F//PH/D	PreSeed	In Crop	F//PH/D	PreSeed	In Crop	F//PH/D	PreSeed	In Crop	F//PH/D	PreSeed	In Crop	F//PH/D	PreSeed	In Crop	F//PH/D
spring wheat	6.06	23.74	14.21	0.00	0.00	0.00	0.00	0.00	0.00	6.06	23.74	8.88	6.06	23.74	8.88	6.06	23.74	17.76
cps wheat	6.06	23.74		0.00	0.00		0.00	0.00		6.06	23.74		6.06	23.74		6.06	23.74	
durum wheat				0.00	0.00	0.00	0.00	0.00	0.00							6.06	23.74	17.76
soft white wheat																6.06	23.74	17.76
winter wheat							0.00	0.00										
malt barley	6.06	23.74		0.00	0.00		0.00	0.00		6.06	23.74		6.06	23.74		6.06	23.74	17.76
feed barley	6.06	11.87		0.00	0.00		0.00	0.00		6.06	11.87		6.06	11.87		6.06	11.87	6.06
milling oats	6.06	7.58		0.00	0.00		6.06	7.58		6.06	7.58		6.06	7.58				
argentine canola	6.06	13.64		0.00	0.00		6.06	13.64		6.06	13.64		6.06	13.64		6.06	13.64	19.70
polish canola													6.06	14.14				
field pea	6.06	14.14	19.70	6.06	14.14		6.06	14.14	19.70	6.06	14.14	19.70	6.06	14.14				
yellow mustard				6.06	14.14		6.06	14.14										
chickpeas				12.38	6.57	19.99												
lentils				19.00	17.75	23.60	19.00	17.75	23.60									
flax							6.06	17.17										
dry beans																6.06	14.14	22.73
cereal silage	6.06	7.58					6.06	7.58		6.06	7.58		6.06	7.58		6.06	7.58	
mixed hay	1.52			1.52			1.52			1.52			1.52					
alfalfa hay	1.89									1.89			1.89			2.27		

2018 Cropping Alternatives

2018 Production Costs and Returns (\$/acre)

Black Soils

Stubble Seeded Crops

	Spring Wheat	CPS Wheat	Feed Barley	Malt Barley	Milling Oats	Argentine HT Canola	Field Peas	Mixed Hay	Alfalfa Hay	Cereal Silage
	2 CWRS 11.5%	1 CPSR	1 CW	Select CW 2R	2 CW	1 CAN	2 CAN			
Expected Yield per Acre	60.00 bu	70.00 bu	83.00 bu	83.00 bu	96.00 bu	46.00 bu	56.00 bu	2.25 t	2.50 t	7.57 t
Expected Market Price	6.00 /bu	5.15 /bu	3.75 /bu	5.00 /bu	3.00 /bu	10.75 /bu	6.75 /bu	70.00 /t	90.00 /t	44.00 /t
Crop Sales (\$/acre)	360.00	360.50	311.25	415.00	288.00	494.50	378.00	157.50	225.00	333.08
Direct Expenses:										
Seed, Cleaning & Treatment	33.13	29.94	22.81	30.46	20.25	62.50	45.60	3.53	10.63	19.60
Fertilizer (NPKS blend)	58.00 80-30-10-0	58.00 80-30-10-0	58.00 80-30-10-0	60.50 70-30-20-10	50.00 70-30-0-0	83.50 100-40-15-20	22.50 5-30-15-0	15.00 15-15-0-0	15.00 5-25-0-0	45.00 65-25-0-0
Chemical	44.02 *	44.02 *	17.93	44.02 *	13.64	35.46 *	39.91 *	1.52	1.89	13.64
Hail/Crop Insurance	17.16	19.88	15.24	18.52	17.71	20.84	25.16	NA	NA	NA
Trucking & Marketing	21.11	24.63	23.90	23.90	19.45	13.73	19.70	54.76	60.03	24.22
Fuel, Oil & Lube	19.74	17.87	18.67	20.54	13.07	20.27	25.60	8.53	5.33	33.61
Machinery Repairs	17.97	17.71	11.98	17.45	11.98	15.89	18.49	15.63	7.29	11.46
Building Repairs	2.08	5.21	2.08	5.73	2.86	2.34	4.69	5.21	3.13	3.65
Custom Work	2.04	2.04	2.30	3.06	14.80	2.55	8.42	2.04	4.59	5.10
Labour (Paid and Unpaid)	18.39	22.47	14.81	24.01	19.92	18.90	22.47	25.54	11.24	32.69
Utilities & Miscellaneous	10.34	10.34	10.34	10.34	10.34	12.59	12.59	6.27	6.27	7.18
Operating Interest	6.82	6.66	4.99	6.82	4.24	9.16	5.45	1.01	1.39	3.95
Total Direct Expense	250.80	258.77	203.05	265.33	198.26	297.74	250.60	139.05	126.80	200.09
Contribution Margin	109.20	101.73	108.20	149.67	89.74	196.76	127.40	18.45	98.20	132.99

Total Cost per Unit	6.61	5.78	4.20	4.95	3.58	9.64	7.07	106.81	91.23	39.81
Break-Even Yield	67.00 bu	79.00 bu	93.00 bu	83.00 bu	115.00 bu	42.00 bu	59.00 bu	3.43 t	2.53 t	6.85 t

Capital Costs by Enterprise	Crops	Forages
Crop Share/Cash Rent	80.50	41.02
Licenses and Insurance	11.77	5.89
Depreciation	47.78	50.77
Paid Capital Interest	6.92	4.61
Total Capital Costs	146.97	102.29
Adjusted Capital Costs	145.50	101.27


Questions?
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Note: Please refer to 2018 Methodology on Ropin the Web.

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2018 Cropping Alternatives

2018 Production Costs and Returns (\$/acre)

Brown Soils

Stubble Seeded Crops													
	Spring Wheat	CPS Wheat	Durum Wheat	Feed Barley	Malt Barley	Milling Oats	Argentine HT Canola	Field Peas	Red Lentil	Kabuli Chickpea	Yellow Mustard	Mixed Hay	Summer Fallow
	<small>1 CWRS 13.5%</small>	<small>1 CPSR</small>	<small>1 CWAD 13%</small>	<small>1 CW</small>	<small>Select CW 2R</small>	<small>2 CW</small>	<small>1 CAN</small>	<small>2 CAN</small>	<small>2 CAN</small>	<small>2 CW 8mm</small>	<small>1 CAN</small>		
Expected Yield per Acre	38.00 bu	40.00 bu	40.00 bu	53.00 bu	53.00 bu	58.00 bu	30.00 bu	45.00 bu	1525.00 lbs	1463.00 lbs	661.00 lbs	1.50 t	0.00
Expected Market Price	6.75 /bu	5.15 /bu	7.00 /bu	4.00 /bu	5.20 /bu	3.00 /bu	10.75 /bu	6.75 /bu	0.22 /lb	0.41 /lb	0.40 /lb	70.00 /t	0.00
Crop Sales (\$/acre)	256.50	206.00	280.00	212.00	275.60	174.00	322.50	303.75	335.50	599.83	264.40	105.00	0.00
Direct Expenses:													
Seed, Cleaning & Treatment	23.19	20.96	28.19	15.97	21.32	16.20	50.00	41.80	22.80	72.00	23.00	3.24	0.00
Fertilizer (NPKS blend)	36.50 50-20-5-0	36.50 50-20-5-0	36.50 50-20-5-0	44.00 60-25-5-0	47.50 50-30-10-10	35.00 50-20-0-0	52.50 65-25-10-10	16.00 5-20-10-0	12.50 5-20-0-0	17.50 5-30-0-0	34.50 40-20-0-10	10.00 10-10-0-0	0.00
Chemical	42.49 *	42.49 *	42.49 *	18.04	42.49 *	13.72	33.69 *	40.15 *	60.35 *	39.17 *	20.33	1.52	18.11
Hail/Crop Insurance	15.39	18.93	15.96	14.12	15.83	12.51	22.78	21.77	28.27	37.68	16.95	NA	NA
Trucking & Marketing	13.37	14.07	14.07	15.26	15.26	11.75	8.96	15.83	9.11	8.74	3.95	36.40	0.00
Fuel, Oil & Lube	15.01	14.25	14.43	13.87	14.80	15.15	16.49	14.81	12.27	14.67	13.87	7.20	7.73
Machinery Repairs	15.36	11.72	12.50	8.85	8.33	10.42	8.33	11.20	8.33	9.38	8.85	10.42	9.38
Building Repairs	1.56	2.60	1.30	1.04	1.04	2.60	1.56	2.34	2.86	2.08	1.04	3.13	1.04
Custom Work	4.08	1.53	3.57	4.08	2.55	2.55	8.17	2.04	2.04	4.08	3.06	2.04	0.00
Labour (Paid and Unpaid)	21.45	17.88	17.88	16.35	16.35	14.30	18.90	13.54	13.28	15.32	13.79	16.35	10.22
Utilities & Miscellaneous	10.34	10.34	8.96	8.96	8.96	6.27	8.96	8.96	6.71	7.66	7.18	5.41	2.60
Operating Interest	5.16	5.05	5.41	3.94	5.62	3.28	6.88	4.95	4.83	6.50	3.93	0.75	0.91
Total Direct Expense	203.91	196.33	201.28	164.48	200.05	143.75	237.22	193.38	183.35	234.78	150.46	96.45	49.99
Contribution Margin	52.59	9.67	78.72	47.52	75.55	30.25	85.28	110.37	152.15	365.05	113.94	8.55	(49.99)

Total Cost per Unit	7.66	7.08	7.21	4.74	5.42	3.98	10.81	6.23	0.18	0.22	0.36	114.98	N/A
Break-Even Yield	44.00 bu	56.00 bu	42.00 bu	63.00 bu	56.00 bu	77.00 bu	31.00 bu	42.00 bu	1229.00 lbs	785.00 lbs	594.00 lbs	2.46 t	N/A

Capital Costs by Enterprise	Crops	Forages
Crop Share/Cash Rent	41.54	32.31
Licenses and Insurance	5.89	8.56
Depreciation	28.67	32.85
Paid Capital Interest	11.79	3.07
Total Capital Costs	87.88	76.79
Adjusted Capital Costs	87.00	76.03


Questions?
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Note: Please refer to 2018 Methodology on Ropin the Web.

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2018 Cropping Alternatives

2018 Production Costs and Returns (\$/acre)

Dark Brown Soils

Stubble Seeded Crops															
	Spring Wheat	CPS Wheat	Durum Wheat	Winter Wheat	Feed Barley	Malt Barley	Milling Oats	Argentine HT Canola	Field Peas	Flax	Yellow Mustard	Red Lentil	Mixed Hay	Cereal Silage	
	1 CWRS 13.5%	1 CPSR	1 CWAD 13%	Select CWRW	1 CW	Select CW 2R	2 CW	1 CAN	2 CAN	1 CW	1 CAN				
Expected Yield per Acre	44.00 bu	49.00 bu	41.00 bu	46.00 bu	63.00 bu	63.00 bu	75.00 bu	35.00 bu	48.00 bu	21.00 bu	706.00 lbs	1500.00 lbs	1.75 t	5.73 t	
Expected Market Price	6.75 /bu	5.15 /bu	6.95 /bu	4.75 /bu	3.60 /bu	5.20 /bu	3.00 /bu	10.75 /bu	6.75 /bu	11.81 /bu	0.40 /lb	0.22 /lb	70.00 /t	44.00 /t	
Crop Sales (\$/acre)	297.00	252.35	284.95	218.50	226.80	327.60	225.00	376.25	324.00	248.01	282.40	330.00	122.50	252.12	
Direct Expenses:															
Seed, Cleaning & Treatment	26.50	23.95	28.19	25.50	18.25	24.37	18.23	62.50	41.80	0.00	23.00	22.80	3.24	15.68	
Fertilizer (NPKS blend)	44.00 60-25-5-0	44.00 60-25-5-0	44.00 60-25-5-0	44.00 60-25-5-0	49.00 70-25-5-0	54.00 60-30-15-10	37.50 55-20-0-0	62.00 75-30-10-15	16.00 5-20-10-0	35.00 50-20-0-0	42.00 50-25-0-10	15.00 5-25-0-0	12.50 10-15-0-0	40.00 60-20-0-0	
Chemical	42.49 *	42.49 *	42.49 *	13.72 *	18.04	42.49 *	13.72	33.69 *	40.15 *	23.38 *	20.33	60.35 *	1.52	13.72	
Hail/Crop Insurance	16.56	19.73	17.16	12.96	12.08	17.73	13.71	24.40	21.77	18.68	15.33	28.27	NA	NA	
Trucking & Marketing	15.48	17.24	14.43	16.19	18.14	18.14	15.19	10.45	16.89	6.94	4.22	8.96	42.51	18.33	
Fuel, Oil & Lube	13.15	15.02	15.47	15.00	13.34	14.23	12.80	15.49	15.41	11.86	13.87	12.27	9.39	13.87	
Machinery Repairs	12.76	13.02	11.46	12.50	12.50	13.02	11.46	15.63	14.06	11.46	11.46	8.33	9.90	7.29	
Building Repairs	1.04	1.56	1.04	1.04	2.08	2.60	1.04	1.56	1.82	1.56	1.56	2.86	2.60	1.30	
Custom Work	2.04	3.06	3.06	3.06	6.12	6.12	2.04	5.10	3.06	8.17	4.59	2.04	9.70	40.83	
Labour (Paid and Unpaid)	12.77	13.28	11.75	12.77	12.51	13.28	13.28	14.30	12.51	14.81	13.79	13.28	10.22	10.22	
Utilities & Miscellaneous	10.34	10.34	8.96	8.96	8.96	8.96	6.27	8.96	8.96	8.96	8.96	6.71	6.27	7.18	
Operating Interest	5.71	5.58	5.79	4.20	4.31	6.10	3.51	7.99	4.95	2.95	4.31	4.96	0.87	3.50	
Total Direct Expense	202.85	209.28	203.80	169.90	175.33	221.05	148.76	262.08	197.39	143.75	163.41	185.83	108.72	171.92	
Contribution Margin	94.15	43.07	81.15	48.60	51.47	106.55	76.24	114.17	126.61	104.26	118.99	144.17	13.78	80.20	
Total Cost per Unit	6.78	6.22	7.30	5.77	4.30	5.03	3.26	10.22	6.10	11.40	0.37	0.17	102.97	42.48	
Break-Even Yield	45.00 bu	60.00 bu	44.00 bu	56.00 bu	76.00 bu	61.00 bu	82.00 bu	34.00 bu	44.00 bu	21.00 bu	648.00 lbs	1169.59 lbs	2.57 t	5.53 t	

Capital Costs by Enterprise	Crops	Forages
Crop Share/Cash Rent	55.50	34.50
Licenses and Insurance	5.08	5.35
Depreciation	29.86	18.52
Paid Capital Interest	6.15	13.84
Total Capital Costs	96.60	72.20
Adjusted Capital Costs	95.63	71.48

Questions?
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Alberta Agriculture and Forestry
Note: Please refer to 2018 Methodology on Ropin the Web.


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2018 Cropping Alternatives

2018 Production Costs and Returns (\$/acre)

Grey-Wooded Soils

Stubble Seeded Crops

	Spring	CPS	Feed	Malt	Milling	Argentine	Field	Alfalfa	Mixed	Cereal
	Wheat	Wheat	Barley	Barley	Oats	HT Canola	Peas	Hay	Hay	Silage
	2 CWRS 11.5%	1 CPSR	1 CW	Select CW 2R	2 CW	1 CAN	2 CAN			
Expected Yield per Acre	58.00 bu	70.00 bu	78.00 bu	78.00 bu	94.00 bu	44.00 bu	50.00 bu	2.25 t	2.50 t	7.08 t
Expected Market Price	6.00 /bu	5.15 /bu	3.50 /bu	5.00 /bu	3.00 /bu	10.75 /bu	6.75 /bu	90.00 /t	70.00 /t	44.00 /t
Crop Sales (\$/acre)	348.00	360.50	273.00	390.00	282.00	473.00	337.50	202.50	175.00	311.52
Direct Expenses:										
Seed, Cleaning & Treatment	33.13	29.94	22.81	30.46	20.25	62.50	45.60	12.50	3.53	19.60
Fertilizer (NPKS blend)	55.50 80-25-10-0	55.50 80-25-10-0	58.00 80-30-10-0	57.50 70-25-25-5	50.00 75-25-0-0	86.50 100-40-25-20	20.00 5-25-15-0	15.00 5-25-0-0	17.50 20-15-0-0	47.50 70-25-0-0
Chemical	38.92 *	38.92 *	18.04	38.92 *	13.72	29.73 *	40.15 *	1.91	1.52	13.72
Hail/Crop Insurance	22.54	23.45	18.59	22.13	17.13	23.27	24.01	NA	NA	NA
Trucking & Marketing	20.41	24.63	22.46	22.46	19.04	13.14	17.59	54.76	60.03	22.65
Fuel, Oil & Lube	22.41	20.52	19.74	21.06	22.40	22.67	23.47	10.67	12.80	22.40
Machinery Repairs	17.71	15.36	14.58	17.71	13.54	23.44	21.09	7.81	11.98	15.89
Building Repairs	1.04	2.60	2.60	2.08	3.65	2.08	3.65	1.56	1.04	1.04
Custom Work	5.10	5.36	5.61	5.61	7.15	5.61	5.10	17.35	5.61	35.73
Labour (Paid and Unpaid)	21.96	20.94	21.45	20.18	21.45	24.52	23.24	17.88	18.90	21.45
Utilities & Miscellaneous	10.34	10.34	10.34	10.34	10.34	12.59	12.59	6.27	5.84	7.18
Operating Interest	6.44	6.28	4.99	6.41	4.24	9.03	5.34	1.48	1.14	4.08
Total Direct Expense	255.50	253.85	219.23	254.85	202.91	315.08	241.83	147.20	139.91	211.24
Contribution Margin	92.50	106.65	53.77	135.15	79.09	157.92	95.67	55.30	35.09	100.28

Total Cost per Unit	7.02	5.79	4.76	5.21	3.77	10.61	7.87	96.39	83.84	39.68
Break-Even Yield	68.00 bu	79.00 bu	106.00 bu	82.00 bu	119.00 bu	44.00 bu	59.00 bu	2.41 t	2.99 t	6.38 t

Capital Costs by Enterprise	Crops	Forages
Crop Share/Cash Rent	65.50	30.50
Licenses and Insurance	11.24	4.82
Depreciation	54.95	30.46
Paid Capital Interest	21.52	4.61
Total Capital Costs	153.21	70.39
Adjusted Capital Costs	151.68	69.69


Questions?
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 Alberta Agriculture and Forestry
Note: Please refer to 2018 Methodology on Ropin the Web.

Prepared March 12, 2018

2018 Production Costs and Returns (\$/acre)

Grey-Wooded (Peace Region)

Stubble Seeded Crops

	Spring Wheat		CPS Wheat		Feed Barley		Malt Barley		Milling Oats		Argentine HT Canola		Polish Canola		Field Peas		Mixed Hay		Alfalfa Hay		Cereal Silage	
	2 CWRS 11.5%	1 CPSR	1 CW	Select CW 2R	2 CW	1 CAN	1 CAN	2 CAN	Mixed Hay	Alfalfa Hay	Cereal Silage											
Expected Yield per Acre	56.00 bu	65.00 bu	76.00 bu	76.00 bu	99.00 bu	39.00 bu	26.00 bu	50.00 bu	1.75 t	2.00 t	6.87 t											
Expected Market Price	5.80 /bu	5.05 /bu	3.35 /bu	4.90 /bu	2.80 /bu	10.55 /bu	10.55 /bu	6.53 /bu	70.00 /t	90.00 /t	40.00 /t											
Crop Sales (\$/acre)	324.80	328.25	254.60	372.40	277.20	411.45	274.30	326.50	122.50	180.00	274.80											
Direct Expenses																						
Seed, Cleaning & Treatment	26.50	23.95	18.25	24.37	16.20	50.00	23.00	41.80	3.53	12.50	15.68											
Fertilizer (NPKS blend)	49.00 70-25-5-0	49.00 70-25-5-0	49.00 70-25-5-0	49.50 60-25-15-5	42.50 65-20-0-0	70.00 85-30-20-15	50.50 70-20-5-10	17.50 5-20-15-0	15.00 20-15-0-0	12.50 5-20-0-0	47.50 70-25-0-0											
Chemical	38.92 *	38.92 *	18.04	38.92 *	13.72	29.73 *	20.33	40.15 *	1.52	1.91	13.72											
Hail/Crop Insurance	18.66	20.53	16.13	19.30	18.47	22.28	14.66	24.01	NA	20.55	11.81											
Trucking & Marketing	19.70	22.87	21.88	21.88	20.06	11.64	7.76	17.59	42.51	48.64	21.98											
Fuel, Oil & Lube	12.18	12.49	12.87	14.77	12.80	15.31	15.25	15.35	16.54	16.00	23.47											
Machinery Repairs	12.50	12.50	11.46	12.50	13.02	13.02	12.50	13.54	10.42	8.33	10.42											
Building Repairs	3.91	3.13	2.08	2.08	2.60	4.43	2.08	3.13	1.56	1.04	1.56											
Custom Work	3.06	3.06	6.12	6.38	4.59	3.57	2.81	5.10	0.00	0.00	39.30											
Labour (Paid and Unpaid)	18.39	18.39	17.37	18.90	17.37	19.41	16.86	15.32	10.73	10.22	11.24											
Utilities & Miscellaneous	10.34	10.34	10.34	10.34	10.34	12.59	8.96	8.96	5.84	5.84	5.84											
Operating Interest	5.78	5.65	4.31	5.70	3.66	7.56	4.74	5.02	1.01	1.36	3.88											
Total Direct Expense	218.94	220.82	187.85	224.64	175.33	259.55	179.44	207.47	108.67	138.90	206.39											
Contribution Margin	105.86	107.43	66.75	147.76	101.87	151.90	94.86	119.03	13.83	41.10	68.41											
Total Cost per Unit	5.99	5.19	4.01	4.49	2.95	9.64	11.38	6.48	91.66	95.31	37.57											
Break-Even Yield	58.00 bu	67.00 bu	91.00 bu	70.00 bu	105.00 bu	36.00 bu	29.00 bu	50.00 bu	2.29 t	2.12 t	6.45 t											

Capital Costs by Enterprise	Crops	Forages
Crop Share/Cash Rent	46.29	21.94
Licenses and Insurance	9.63	4.28
Depreciation	48.98	20.91
Paid Capital Interest	12.81	5.12
Total Capital Costs	117.71	52.25
Adjusted Capital Costs	116.54	51.73


Questions?
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Prepared March 12, 2018

2018 Cropping Alternatives

2018 Production Costs and Returns (\$/acre)

Irrigated Soils

Stubble Seeded Crops										
	Spring Wheat	CPS Wheat	Durum Wheat	Soft Wheat	Feed Barley	Malt Barley	Argentine HT Canola	Dry Beans	Alfalfa Hay	Cereal Silage
	<small>1 CWRS 13.5%</small>	<small>1 CPSR</small>	<small>1 CWAD 13%</small>	<small>1 CWSWS</small>	<small>1 CW</small>	<small>Select CW 2R</small>	<small>1 CAN</small>	<small>1 CAN</small>		
Expected Yield per Acre	96.00 bu	105.00 bu	103.00 bu	111.00 bu	125.00 bu	125.00 bu	58.00 bu	2459.00 lbs	4.00 t	11.38 t
Expected Market Price	6.75 /bu	5.15 /bu	6.95 /bu	4.50 /bu	4.00 /bu	5.20 /bu	10.75 /bu	0.36 /lb	90.00 /t	44.00 /t
Crop Sales (\$/acre)	648.00	540.75	715.85	499.50	500.00	650.00	623.50	885.24	360.00	500.72
Direct Expenses										
Seed, Cleaning & Treatment	29.81	26.94	32.22	24.00	22.81	30.46	62.50	49.51	17.50	19.60
Fertilizer (NPKS blend)	71.50 100-40-5-0	71.50 100-40-5-0	71.50 100-40-5-0	76.50 110-40-5-0	71.50 100-40-5-0	61.50 90-30-5-0	90.00 110-50-5-20	69.50 80-50-0-10	23.00 5-40-0-0	70.00 100-40-0-0
Chemical	47.86	47.86	47.86	47.86	24.14	47.86	39.64	43.19	2.29	13.72
Hail/Crop Insurance	14.10	18.58	17.47	11.91	13.88	13.88	21.63	45.58	NA	NA
Trucking & Marketing	33.78	36.95	36.24	39.06	35.99	35.99	17.32	26.17	97.29	36.40
Fuel, Oil & Lube	25.67	27.77	27.87	28.01	30.41	32.44	31.57	45.88	45.34	33.61
Machinery Repairs	29.69	27.34	30.21	27.60	28.91	30.11	30.21	65.10	35.42	19.27
Building Repairs	2.08	2.08	2.08	2.08	2.08	2.08	2.08	4.43	1.04	1.04
Irrigation: Pumping Costs	32.43	32.48	32.43	32.48	31.90	31.90	32.03	31.91	33.51	32.09
Custom Work	8.17	8.17	9.19	9.19	12.25	12.76	7.15	30.11	8.17	33.68
Labour (Paid and Unpaid)	30.65	31.67	31.92	31.67	34.73	34.73	31.67	69.98	34.73	35.75
Utilities & Miscellaneous	13.46	13.46	13.46	13.46	13.46	13.46	13.46	17.91	28.73	17.91
Operating Interest	7.53	7.39	7.65	7.49	5.98	7.06	9.70	8.19	2.16	5.22
Storage and/or Levies	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Direct Expense	346.71	352.18	360.10	351.30	328.03	354.22	388.95	507.47	329.17	318.30
Contribution Margin	301.29	188.57	355.75	148.20	171.97	295.78	234.55	377.77	30.83	182.42
Total Cost per Unit	6.58	6.07	6.26	5.73	4.90	5.11	11.62	0.33	147.83	51.01
Break-Even Yield	94.00 bu	124.00 bu	93.00 bu	142.00 bu	154.00 bu	123.00 bu	63.00 bu	2264.00 lbs	6.57 t	13.19 t

Capital Costs by Enterprise	Crops	Forages	Specialty
Crop Share/Cash Rent	123.08	117.73	129.85
Licenses and Insurance	42.81	26.76	45.16
Depreciation	103.33	107.51	110.50
Paid Capital Interest	18.45	12.81	25.06
Total Capital Costs	287.67	264.81	310.57
Adjusted Capital Costs	284.79	262.16	307.46

Questions?
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