

# AgriProfit\$

## 2013 Cropping Alternatives

Government  
of Alberta ■

### Economics & Competitiveness



**Disclaimer:**

The following regional forecasts are based on the most current cost of production information from the AgriProfit\$ Business Analysis & Research Program. As well as estimation 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 these on regional benchmarks and forecasts. Producers are advised not to base cropping decisions solely on information provided in the following budgets. Alberta Agriculture's crop budgeting software program CropChoice\$ and the blank individual form are available to customize your own crop budgets. You can download CropChoice\$ software free of charge at the following link: [www.agriculture.alberta.ca/cropchoices](http://www.agriculture.alberta.ca/cropchoices).

**Prices:**

Expected market prices are estimates ONLY, which are based on forecasts for 2013 new crop. Prices in these budgets are estimated by Agriculture and Rural Development specialists using future price outlooks less Alberta deductions, Informa Economics forecasts, and Agriculture and Agri-Food Canada's Market Outlook Reports. Prices are not adjusted to reflect differences in soil zone regions other than differences in grade. Use this information with caution as current prices may not match new crop market signals.

**Yields:**

There is a wide range of yields within each soil zone region. Therefore, yield estimates by crop represent average achievable target yields, which are supported by regional crop specialists.

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

Seed costs are based on data collected by the Alberta Farm Input Prices Survey (AIMS) and AgriProfit\$, 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 blend of fall 2012 and spring 2013 fertilizer prices to capture common practices, such as fall and spring application, and pre-buying inputs. NPKS blends are based on estimated crop requirements for nutrient deficient, stubble-seeded crops in each soil zone.

<b>Nitrogen</b>	\$0.68/lb actual N	(\$696.25/tonne for 46-0-0)
<b>Phosphorous</b>	\$0.53/lb actual P	(\$772.5/tonne for 11-51-0)
<b>Potassium</b>	\$0.46/lb actual K	(\$612.5/tonne for 0-0-60)
<b>Sulphur</b>	\$0.37/lb actual S	(\$498.75/tonne for 20-0-0-24)

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

**Chemical:** (See the following Chemical Application Table.)

Chemical costs are based on stubble-seeded crops requiring a non-selective, pre-seed burn-off, and one in-crop herbicide application for broadleaf weeds, grassy weeds or both. Feed barley 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 \*.



## 2013 Cropping Alternatives Methodology

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### **Hail/Crop Insurance:**

Insurance is based on information from AgriProfit\$ and Alberta Financial Services Corporation (AFSC).

### **Trucking & Marketing:**

Trucking and marketing costs are based on AgriProfit\$ data and estimates ranging from \$7-14/tonne.

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

These costs are based on information collected by the AgriProfit\$ program and the Alberta Farm Input Prices Survey. Many of these costs are influenced significantly by differences in regional farming practices. Fuel costs also include an adjustment factor for yield.

### **Operating Interest:**

5% per annum for inputs borrowed (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. Positive contribution margin indicates that the enterprise/crop is economically sustainable.

### **Capital Costs By Enterprise:**

Fixed costs generally do not vary greatly from crop to crop, but these can vary between enterprises and soil zone regions. Average fixed cost profiles by enterprise are included for your information. The capital costs are adjusted to reflect costs averaged for owned and rented fields.

### **Summer Fallow:**

The summer fallow columns included in the Brown and Dark Brown budgets are only provided to reference the expected costs incurred in a non-crop year. Fallow-seeded crops are not included in this analysis because this practice has significantly declined. Producers wanting to evaluate fallow-seeded crops can use CropChoice\$ or the blank worksheet provided.

### **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

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2013 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	28.31		1.75	24.77		1.75	24.77		2	28.31		1.75	24.77		2.25	31.85
cps wheat		2	27.76		1.75	24.29		1.75	24.29		2	27.76		1.75	24.29		2.25	31.23
durum wheat					1.75	23.82		1.75	23.82								2	27.22
soft white wheat																	2	26.13
winter wheat								2	26.13									
malt barley		2	20.90		1.75	18.29		2	20.90		2	20.90		1.75	18.29		2.5	26.13
feed barley		2	18.29		1.75	16.00		2	18.29		2	18.29		1.75	16.00		2.5	22.86
milling oats		2.5	15.81		2	12.65		2.25	14.23		2.25	14.23		2	12.65			
argentine canola	5		39.66	4		31.73	5		39.66	5		39.66	4		31.73	5		39.66
polish canola													4		31.73			
field pea		3	47.36		2.75	43.41		2.75	43.41		3	47.36		2.75	43.41			
yellow mustard				9		12.57	10		13.97									
chickpeas				120		63.13												
lentils				80		23.67												
flax							45		27.55									
sugar beets																10		124.90
potatoes																2000		367.17
dry beans																60		51.70
cereal silage		2.25	20.57					2	18.29		2.25	20.57		2	18.29		2.5	22.86
mixed hay	11		3.55	10		3.25	10		3.25	11		3.55	11		3.55			
alfalfa hay	10		10.63							10		10.63	10		10.63	14		14.88

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	5.00	22.00	5.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00	22.00	5.00	5.00	22.00	5.00	5.00	22.00	5.00
cps wheat	5.00	22.00		0.00	0.00		0.00	0.00		5.00	22.00		5.00	22.00		5.00	22.00	
durum wheat				0.00	0.00	0.00	0.00	0.00	0.00							5.00	22.00	5.00
soft white wheat																5.00	22.00	5.00
winter wheat							0.00	0.00										
malt barley	5.00	22.00		0.00	0.00		0.00	0.00		5.00	22.00		5.00	22.00		5.00	22.00	23.42
feed barley	5.00	11.00		0.00	0.00		0.00	0.00		5.00	11.00		5.00	11.00		5.00	11.00	5.00
milling oats	5.00	6.50		0.00	0.00		5.00	6.50		5.00	6.50		5.00	6.50				
argentine canola	5.00	19.00		0.00	0.00		5.00	19.00		5.00	19.00		5.00	19.00		5.00	19.00	20.50
polish canola													5.00	12.00				
field pea	5.00	14.50	16.30	5.00	14.50	16.30	5.00	14.50	16.30	5.00	14.50	5.00	5.00	14.50				
yellow mustard				5.00	11.00		5.00	11.00										
chickpeas				11.25	6.50	39.25												
lentils				5.00	10.50	20.50												
flax							5.00	16.50										
sugar beets																5.00	16.00	24.45
potatoes																65.23	155.31	92.00
dry beans																5.00	33.50	24.45
cereal silage	5.00	6.50					5.00	6.50		5.00	6.50		5.00	6.50		5.00	6.50	
mixed hay	1.25			1.25			1.25			1.25			1.25					
alfalfa hay	1.56									1.56			1.56			1.88		

## 2013 Cropping Alternatives

### Individual Production Costs & Returns (\$/Acre)

<i>AgriProfit</i> \$	Crop 1	Crop 2	Crop 3	Crop 4	Crop 5
Expected Yield per Acre					
Expected Market Price per Unit					
<b>Value of Production</b>					
<b>Direct Expenses:</b>					
Seed, cleaning and treatment					
Fertilizer					
Chemical					
Hail & Crop Insurance					
Trucking & Marketing					
Fuel, Oil & Lube					
Irrigation: Pumping Costs					
Machinery Repairs					
Building Repairs					
Utilities & Miscellaneous					
Custom Work					
Paid Labour					
Unpaid Labour					
Operating Interest					
Summerfallow Expense					
Other Expenses					
<b>Total Direct Expense</b>					
<b>Contribution Margin</b>					
Cash/Share Rent & Land Lease					
Taxes, Licenses & Insurance					
Water Rates (Irrigation only)					
Depreciation & Lease Payments					
Paid Capital Interest					
<b>Total Capital Costs</b>					
<b>Return to Mgmt &amp; Equity</b>					
<b>Break-Even Yield</b>					
<b>Break-Even Price</b>					