

Publication 60
**Field Crop
Budgets**
2021

Ministry of Agriculture,
Food and Rural Affairs

Ontario 

These crop budgets are a tool for estimating expenses. The sample costs are only a guide to illustrate a method of preparing your projections. They are based on many assumptions, including seeding rates, levels of fertilizer use, etc. Due to regional differences, there may be considerable variation in results.

To project your break-even price after total costs, enter your farm figures in the spaces provided. The resulting estimate will help you choose your crop mix and set target prices and marketing strategies for your farm.

Electronic versions of these crop budget worksheets can be found at ontario.ca/agbusiness under *Cost of Production Budgets*.

The use of imperial and metric measurement in this publication reflects the way information is reported by industry. Fertilizer rates are typically reported in kilogram (kg)/hectare. See page 20 for metric and imperial conversions.

Front cover: Field of soybeans mid-season.

Back cover: Sprout of recently appeared corn. Photo source: Shutterstock.

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2021 FIELD CROP BUDGETS

Crop budgets are a management tool to estimate costs and evaluate cropping alternatives. The sample costs are not averages or recommended treatments. The budgets comprise treatments derived from crop advisors in the areas where the crops are commonly grown. There will be differences due to growing region, cropping practices, individual needs and yield expectations. The budgets, unless indicated otherwise, are based on conventional tillage practices. Seed costs, except for the *Bacillus thuringiensis* (Bt), Roundup Ready (RR) and herbicide-tolerant corn, spring canola and soybeans, are for non-genetically enhanced varieties. The budgets developed for Bt, RR or herbicide-tolerant varieties do not represent an endorsement of these products. They are included due to the current predominance of these production systems in field crop operations.

Identity Preserved (IP) crops require budgeting for any extra expenses and revenue, e.g., increased seed, weed control, storage and equipment cleaning costs. Some of the budgets provide a line item for this.

Interest rates were calculated at 3.45% for the period between planting and harvest.

These budgets will be most meaningful if you use your expected yields and specific costs in developing production plans. Input prices for seed, fertilizer, fuel and pesticides were based on the survey results reported in the Ontario Farm Input Monitoring Project conducted by the University of Guelph, Ridgetown campus. The production insurance and risk management program premiums shown are the producer premiums at the highest coverage level and at the floating price, if available.

The estimated costs for machinery are derived from agricultural engineering formulas and Ontario average custom rates. The Ontario average custom rates are allocated across the six machinery-related expenses. It is recommended that you use your records to derive your costs. Experience is the best guide to help budget machinery costs. Prior year's statements of income and expenses can provide information on equipment repairs, maintenance and fuel costs. The portion of those costs that relates to crop production can be divided by the acres of crop produced to arrive at a cost per acre.

Overhead expenses are a major part of the total cost of doing business. In addition to the depreciation of machinery, include depreciation on all related tools and storage buildings. Land costs would include property tax and any other land-related costs. Other overhead expenses should include insurance, professional fees, office, vehicles and storage. In all cases, divide overhead expenses by the acreage of crop to express costs on a per-acre basis. Interest on investment is an opportunity cost to you — the rate of return that you expect or want on your invested capital.

If there are significant debt commitments for land and equipment, an alternative method of budgeting overhead expenses is to use the debt servicing requirements. In this case, use the actual interest and principal payment commitments, rather than depreciation and expected return on invested capital.

"Total Revenue" is the yield you expect, multiplied by the price you expect. Yield information is most accurate if based on your experience with the land and techniques you will be using. If you do not have such records, check with AGRICORP or a local farm supply dealer. They can help you develop plans and reasonable expectations for your crops.

"Contribution Margin" is the difference between total operating expenses and total revenue. "Operating Expenses" (e.g., seed, fertilizer, fuel, repairs, etc.) change with the crop grown and the production blend used. "Fixed or overhead costs" will show little or no change whether one crop or another is grown. "Contribution Margin" is a quick and easy measure for comparing relative profitability among your cropping choices.

Table 1. Adjustment of nitrogen requirements for previous crops with nitrogen credits		
Type of crop	N requirement reduction (kg/ha)	
	Corn	Other Crops
Perennial forage, less than one-third legume	0	0
Perennial forage, one-third to half legume	55	55
Perennial forage, half or more legume	110	110
Clover cover crop seeded/ploughed in same year	80	45 ¹
Soybean and field bean residue	30	0

¹ Applies where the legume stand is thick and over 40 cm (16 in.) high.

2021 Crop Comparison Summary Table for Selected Field Crops (\$/acre)*

Expense	Corn Conventional Tillage	Herbicide- Tolerant Spring Canola	Non-GMO Soybeans No Till	Roundup Ready Soybeans No Till	Coloured Beans	White/ Black Beans	Soft Red Winter Wheat No Till	Oats (Southern Ontario)	Hard Red Spring Wheat
Seed	110.75	89.50	52.35	78.15	150.00	88.40	69.45	47.00	70.90
Seed treatment	1.60	–	13.00	13.00	–	–	–	–	–
Fertility	123.75	98.30	41.00	41.00	40.10	40.10	97.25	68.20	64.15
Pesticides	25.25	54.80	82.65	27.00	121.85	130.35	40.70	25.15	30.20
Total Inputs	261.35	242.60	189.00	159.15	311.95	258.85	207.40	140.35	165.25
Tillage	63.00	56.00	–	–	97.00	61.00	–	56.00	56.00
Planting	25.00	22.00	26.00	26.00	25.00	30.00	27.00	22.00	22.00
Spraying	11.00	33.00	22.00	22.00	44.00	55.00	33.00	33.00	22.00
Fertilizing	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
Harvesting & trucking	87.85	51.00	57.50	57.50	117.75	66.00	66.30	56.35	58.80
Total Machinery	198.85	174.00	117.50	117.50	295.75	224.00	138.30	179.35	170.80
Drying	96.95	–	–	–	–	–	–	–	–
Production insurance	12.20	16.45	8.60	8.60	24.45	16.95	10.15	7.20	9.25
Risk management	6.90	10.35	3.00	3.00	0.20	1.30	3.85	10.00	4.90
Interest @ 3.45%	9.70	6.85	5.20	4.70	8.70	7.65	9.90	4.20	5.10
Marketing & other	43.35	4.00	13.80	13.80	5.85	6.80	1.90	1.70	1.25
Total Costs	629.30	454.25	337.10	306.75	646.90	515.55	371.50	342.80	356.55
Yield									
Price									
Gross Return									
Net Margin/Acre									
Less:									
Land cost/rent									
Utilities/acct/misc.									
Net Return per Acre									

* The crop comparison summary table is derived from the individual budgets in the publication. Some expense items have been combined in the summary table. For the break-out of the individual expenses, refer to the respective budget in the publication.

Crop Budgeting Tools:

- Ontario Enterprise Budgeting Tools: ontario.ca/agbusiness, search for “budgeting tools”
- Custom Farmwork Rates: ontario.ca/agbusiness, search for “custom farm rates”
- Custom Farmwork Rate calculator: ontario.ca/agbusiness, search for “custom farm rate calculator”
- Field Crop Statistics : Harvested Area, Production, Crop Prices, Corn Supply and Disposition: ontario.ca/agbusiness, search for “field crop statistics”
- Crop Nutrient Removal calculator (from IPNI): www.ipni.net/article/IPNI-3346
- Corn Nitrogen calculator: www.gocorn.net
- Mobile Apps: Cash Cropper, Pest Manager and Ontario Corn Nitrogen Calculator: www.gfo.ca/apps

ALFALFA-TIMOTHY HAY

DIRECT SEEDING ESTABLISHMENT			Sample Costs/ Acre	Your Farm Budget
Seed	13.45 kg/ha alfalfa		74.15	
Other seed (timothy)	4.48 kg/ha		13.95	
Inoculant			1.05	
Fertility	crop removal	24 kg/ha P ₂ O ₅ (6.1 kg/tonne removal rate)	8.85	
		92 kg/ha K ₂ O (23.5 kg/tonne removal rate)	30.40	
Herbicide	broadleaf weed control		15.90	
Production insurance			4.20	
Tractor and machine expenses	fuel (37 L) and lubricants		40.50	
	repairs		41.40	
Custom work	2 pesticide applications		22.00	
	2 fertilizer applications, mixing and delivery		24.00	
	bale wrapping — plastic — 50% yield		42.40	
Twine			2.10	
Operator labour (self or hired)			27.85	
Interest			11.05	
Total Establishment Year Expenses			359.80	
ANNUAL OPERATING EXPENSES (costs based on projected yield of 3.15 tonnes DM/acre over 2 cuts)				
Establishment year expenses — over 4 years (less establishment year sales)				
Fertility	crop removal	47 kg/ha P ₂ O ₅ (6.1 kg/tonne removal rate)	17.60	
		183 kg/ha K ₂ O (applied in fall) (23.5 kg/tonne removal rate)	60.60	
Tractor and machine expenses	fuel (26 L) and lubricants		28.10	
	repairs		32.10	
Twine			4.20	
Production insurance			21.25	
Custom work	2 fertilizer applications, mixing and delivery		24.00	
	bale wrapping — plastic		84.80	
Other costs			—	
Land rent			—	
Operator labour (self or hired)			28.80	
Interest on operating			6.25	
Total Annual Operating Expenses			307.70	
REVENUE				
Expected yield _____				
Expected price _____				
Total Revenue (Yield x Price)				
CONTRIBUTION MARGIN (Revenue – Operating Expenses)				
OVERHEAD EXPENSES				
Machinery	depreciation		32.95	
	interest on investment		15.85	
Land			—	
Other overhead			6.85	
NITROGEN CREDIT TO FOLLOWING CROPS IN ROTATION				
Nitrogen credit (\$/acre = N reduction (from Table 1) x price of N)				
Grain yield increase				
Total benefits/year				
TOTAL EXPENSES			363.35	
Break-even price on your farm (total expenses/expected yield):				

BARLEY

OPERATING EXPENSES (costs based on projected yield of 1.5 tonnes/acre (70 bu/acre))			Feed Barley Sample Costs/ Acre	Malting Barley Sample Costs/ Acre	Your Farm Budget
Expenses for Grain					
Seed	1.0–1.4 million seeds/acre, certified seed		56.40	56.40	
Fertility	113 kg/ha N (246 kg/ha Urea (Northern Ontario — Feed)		53.65	–	
	90 kg/ha N (196 kg/ha Urea (Southern Ontario — Feed)		42.70	–	
	56 kg/ha N (122 kg/ha Urea (Eastern Ontario — Feed)		26.60	–	
	45–67 kg/ha N (98–146 kg/ha Urea (Malting))		–	26.60	
	crop	30 kg/ha P ₂ O ₅ (8.0 kg/tonne removal rate)	11.30	11.30	
	removal	24 kg/ha K ₂ O (6.3 kg/tonne removal rate)	7.90	7.90	
Herbicide	broadleaf weed control		10.55	10.55	
	grassy weed control		9.60	9.60	
Fungicide			19.65	19.65	
Tractor and machine expenses	fuel (26 L) and lubricants		28.60	28.60	
	repairs and maintenance		25.45	25.45	
Production insurance			7.20	7.20	
Risk Management Program			12.10	12.10	
Marketing board fees (\$1.19/tonne)			1.80	1.80	
Custom work	fertilizer application, mixing and delivery		12.00	12.00	
	2 pesticide application		22.00	22.00	
	other		–	–	
Trucking (\$9.00/tonne)			13.70	13.70	
Storage			–	–	
Quality testing			–	–	
Land rent			–	–	
Operator labour (self or hired)			12.65	12.65	
Interest on operating			6.65	6.40	
Total Operating Expenses — Grain (Feed (average of 3 regions))			298.55	283.90	
Expenses for Straw (costs based on projected yield of 1.89 tonnes/acre)					
Fertility	crop	12 kg/ha P ₂ O ₅ (2.6 kg/tonne removal rate)	4.55	4.55	
	removal	94 kg/ha K ₂ O (20.0 kg/tonne removal rate)	31.30	31.30	
Tractor and machine expenses	fuel (6 L) and lubricants		6.15	6.15	
	repairs and maintenance		7.20	7.20	
Twine			6.50	6.50	
Other			13.90	13.90	
Total Operating Expenses — Straw			69.60	69.60	
Total Operating Expenses			368.15	353.50	
REVENUE					
Expected barley yield _____					
Expected barley price _____					
Total Market Revenue (Yield x Price)					
Program payment					
Total Barley Revenue					
Expected straw yield _____					
Expected straw price _____					
Total Straw Revenue (Yield x Price)					
Total Revenue					
CONTRIBUTION MARGIN (Revenue – Operating Expenses)					
OVERHEAD EXPENSES		Feed Barley		Malting Barley	
		Barley Only	Barley & Straw	Barley Only	Barley & Straw
Machinery	depreciation	37.65	46.05	37.65	46.05
	interest on investment	13.05	15.45	13.05	15.45
Land		–	–	–	–
Other overhead		5.65	7.65	5.65	7.65
TOTAL EXPENSES		354.90	437.30	340.25	422.65
Break-even price on your farm (total expenses/expected yield):					

SPRING CANOLA (Herbicide Tolerant)

OPERATING EXPENSES (costs based on projected yield of 1.0 tonnes/acre (2,200 lb/acre))		Sample Costs/ Acre	Your Farm Budget
Seed	5.6 kg/ha hybrid, treated	89.50	
Fertility	110 kg/ha N (188 kg/ha urea + 112 kg/ha ammonium sulphate) ¹	65.70	
	crop removal 61 kg/ha P ₂ O ₅ (24.5 kg/tonne removal rate)	22.70	
	30 kg/ha K ₂ O (12.0 kg/tonne removal rate)	9.90	
Herbicide	grass and broadleaf weed control	11.90	
Technology use agreement		–	
Insecticide	if required (swede midge)	21.90	
Fungicide	if required	21.00	
Tractor and machine expenses	fuel (30 L) and lubricants	33.50	
	repairs and maintenance	22.00	
Marketing board and Grain Financial Protection fees (\$4.00/tonne)		4.00	
Production insurance		16.45	
Risk Management Program		10.35	
Custom work	fertilizer application, mixing and delivery	12.00	
	3 pesticide applications	33.00	
	other	–	
Trucking (\$9.00/tonne)		9.00	
Storage		–	
Land rent		–	
Operator labour (self or hired)		15.50	
Interest on operating		6.85	
Total Operating Expenses		405.25	
REVENUE			
Expected yield _____			
Expected price _____			
Total Market Revenue (Yield x Price)			
Program payment			
Total Revenue			
CONTRIBUTION MARGIN (Revenue – Operating Expenses)			
OVERHEAD EXPENSES			
Machinery	depreciation	33.90	
	interest on investment	9.90	
Land		–	
Other overhead		5.45	
TOTAL EXPENSES		454.50	
Break-even price on your farm (total expenses/expected yield):			

¹ Nitrogen rate is based on nitrogen price of \$1.19/kg (\$0.54/lb) N and a canola price of \$500/tonne. 112 kg/ha ammonium sulphate (21-0-0-24) supplies 27 kg/ha sulphur.

See the canola section of the OMAFRA *Agronomy Guide for Field Crops*, Publication 811, for more accurate nitrogen requirements for canola, adjusted for yield and fertilizer cost.

WINTER CANOLA

OPERATING EXPENSES (costs based on projected yield of 1.3 tonnes/acre)		Sample Costs/ Acre	Your Farm Budget
Seed*	4.5 kg/ha — hybrid, treated	75.30	
Fertility**	195 kg/ha N (373 kg/ha urea + 112 kg/ha ammonium sulphate) ¹	106.05	
	crop removal 80 kg/ha P ₂ O ₅ (24.5 kg/tonne removal rate)	29.55	
	39 kg/ha K ₂ O (12.0 kg/tonne removal rate)	12.95	
Herbicide	volunteer cereal control	11.85	
Insecticide	if required (cabbage seedpod weevil)	21.90	
Fungicide	if required	21.00	
Tractor and machine expenses	fuel (24 L), lubricants	26.60	
	repairs and maintenance	16.05	
Marketing board and Grain Financial Protection fees (\$4.00/tonne)		5.20	
Production insurance		16.45	
Risk Management Program		13.45	
Custom work	fertilizer application, mixing and delivery	12.00	
	3 pesticide applications	33.00	
	other	—	
Trucking (\$9.00/tonne)		11.70	
Storage		—	
Land rent		—	
Operator labour (self or hired)		12.05	
Interest on operating		7.35	
Total Operating Expenses		432.45	
REVENUE			
Expected yield _____			
Expected price _____			
Total Market Revenue (Yield x Price)			
Program payment			
Total Revenue			
CONTRIBUTION MARGIN (Revenue – Operating Expenses)			
OVERHEAD EXPENSES			
Machinery	depreciation	24.35	
	interest on investment	7.35	
Land		—	
Other overhead		2.25	
TOTAL EXPENSES		466.40	
Break-even price on your farm (total expenses/expected yield):			
* Seeding rate recommended range is 3.4–5.6 kg/ha (3–5 lb/acre). The lower rate may be difficult to achieve with some seed drills.			
** Additional nitrogen in the fall may be beneficial if seeding is delayed.			
¹ 112 kg/ha ammonium sulphate (21-0-0-24) supplies 27 kg/ha sulphur.			

COLOURED BEANS

OPERATING EXPENSES (costs based on projected yield of 0.86 tonnes/acre (19 cwt/acre))			Sample Costs/ Acre	Your Farm Budget
Seed	78–90 kg/ha (4–5 seeds/ft row) certified, treated seed (with fungicide plus Cruiser insecticide)		150.00	
Fertility	40 kg/ha N		19.00	
	crop removal	30 kg/ha P ₂ O ₅ (14.0 kg/tonne removal rate)	11.15	
		30 kg/ha K ₂ O (14.0 kg/tonne removal rate)	9.95	
Herbicide	annual grass and broadleaf weeds		69.15	
	other weed control, if required		–	
Insecticide			–	
Fungicide	if required (white mould)		44.70	
Crop pre-harvest			8.00	
Tractor and machine expenses	fuel (45 L) and lubricants		49.55	
	repairs and maintenance		48.70	
Marketing board fees (\$6.80/tonne)			5.85	
Production insurance			24.45	
Risk Management Program			0.20	
Custom work	fertilizer application, mixing and delivery		12.00	
	4 pesticide applications		44.00	
Trucking (\$9.00/tonne)			7.75	
Drying			–	
Land rent			–	
Operator labour (self or hired)			25.10	
Interest on operating			8.70	
Total Operating Expenses			538.25	
REVENUE				
Expected yield _____				
Expected price _____				
Total Market Revenue (Yield x Price)				
Less pick charges (typically 2%–4%)				
Program payment				
Total Revenue				
CONTRIBUTION MARGIN (Revenue – Operating Expenses)				
OVERHEAD EXPENSES				
Machinery	depreciation		71.90	
	interest on investment		25.50	
Land			–	
Other overhead			11.60	
TOTAL EXPENSES			647.25	
Break-even price on your farm (total expenses/expected yield):				

GRAIN CORN

OPERATING EXPENSES (costs based on projected yield of 4.43 tonnes/acre (174 bu/acre))		Tillage System			Your Farm Budget
		Conventional	Non-GMO Conventional	No-Till	
		Sample Costs/Acre	Sample Costs/Acre	Sample Costs/Acre	
Seed ¹ (average cost of 3 hybrids)	32,000 kernels — treated — RR ²	109.50	—	109.50	
	32,000 kernels — treated — Bt	99.10	—	99.10	
	32,000 kernels — treated — multi-trait	123.55	—	123.55	
	32,000 kernels — treated — non-GMO	—	89.00	—	
Insecticide seed treatment, if required		1.60	1.60	1.60	
Fertility ³	173 kg/ha N (618 kg/ha of 28-0-0 U.A.N.)	75.95	75.95	75.95	
	crop removal 80 kg/ha P ₂ O ₅ (7.25 kg/tonne removal rate)	29.80	29.80	29.80	
	54 kg/ha K ₂ O (4.9 kg/tonne removal rate)	18.00	18.00	18.00	
Herbicide	annual grass and broadleaf weed	25.25	31.55	25.25	
	burndown	—	—	11.40	
	other weed control, if required	—	—	—	
Insecticide/fungicide	if required	—	—	—	
Tractor and machine expenses	fuel (34 L conventional, 19 L no-till) and lubricant	37.85	37.85	20.70	
	repairs and maintenance	26.15	26.15	15.05	
Marketing board and Grain Financial Protection fees (\$0.401/tonne)		1.75	1.75	1.75	
Production insurance		12.20	12.20	12.20	
Risk Management Program		6.90	6.90	6.90	
Custom work	fertilizer application, mixing and delivery	12.00	12.00	12.00	
	pesticide applications	11.00	11.00	22.00	
	other	—	—	—	
Trucking (\$9.00/tonne)		39.85	39.85	39.85	
Drying (\$21.90/tonne, 8 points)		96.95	96.95	96.95	
Land rent		—	—	—	
Operator labour (self or hired)		15.30	15.30	8.00	
Storage (\$2.35/tonne/month x 4 months)		41.60	41.60	41.60	
Interest on operating		9.70	9.45	9.45	
Total Operating Expenses		572.55	556.90	559.15	
REVENUE					
Expected yield _____ (Corn following corn: 8.5% corn yield decrease)					
Expected price _____					
Total Market Revenue (Yield x Price)					
Program payment					
Total Revenue					
CONTRIBUTION MARGIN (Revenue – Operating Expenses)					
OVERHEAD EXPENSES					
Machinery	depreciation	39.75	39.75	22.35	
	interest on investment	12.55	12.55	7.15	
Land		—	—	—	
Other overhead		4.40	4.40	2.90	
TOTAL EXPENSES		629.25	613.60	591.55	
Break-even price on your farm (total expenses/expected yield):					

¹ Seed treated with fungicide only.

² Roundup Ready.

³ Nitrogen rate is based on the nitrogen rate calculator. Nitrogen recommendation is for corn grown in southwestern/central Ontario, 2,800 heat units, clay loam soil, following wheat with straw removed, with projected corn yield of 4.43 tonnes/acre (174 bu/acre), nitrogen cost of \$1.10/kg and corn price of \$189/tonne (\$4.80/bu).

See www.gocorn.net for more accurate nitrogen requirements for corn.

SILAGE CORN

OPERATING EXPENSES (costs based on projected yield of 8.71 tonnes DM/acre)		Sample Costs/ Acre	Your Farm Budget
Seed	32,000 kernels, with seed treatment	111.10	
Insecticide seed treatment, if required		1.60	
Fertility ¹	173 kg/ha N (618 kg/ha of 28-0-0 U.A.N.)	75.95	
	crop removal 120 kg/ha P ₂ O ₅ (5.5 kg/tonne removal rate)	44.45	
	254 kg/ha K ₂ O (11.7 kg/tonne removal rate)	84.15	
Herbicide	annual grass and broadleaf weeds	25.25	
	other weed control, if required	–	
Insecticide/fungicide	if required	–	
Tractor and machine expenses	fuel (18 L) and lubricants	19.70	
	repairs and maintenance	18.50	
Silo repair and maintenance		–	
Production insurance		12.20	
Silage inoculant		–	
Custom work	fertilizer application, mixing and delivery	12.00	
	pesticide applications	11.00	
	harvest	90.00	
Land rent		–	
Operator labour (self or hired)		8.90	
Interest on operating		8.90	
Total Operating Expenses		523.70	
REVENUE			
Expected yield _____			
Expected price _____			
Total Market Revenue (Yield x Price)			
Program payment			
Total Revenue			
CONTRIBUTION MARGIN (Revenue – Operating Expenses)			
OVERHEAD EXPENSES			
Machinery	depreciation	27.30	
	interest on investment	9.70	
Land		–	
Other overhead		4.65	
TOTAL EXPENSES		565.35	
Break-even price on your farm (total expenses/expected yield):			

¹ Nitrogen rate is based on the nitrogen rate calculator. Nitrogen recommendation is for corn grown in southwestern/central Ontario, 2,800 heat units, clay loam soil, following wheat with straw removed, with projected grain corn yield of 4.43 tonnes/acre (174 bu/acre), ensiled at 65% moisture, nitrogen cost of \$1.10/kg and corn price of \$189/tonne (\$4.80/bu).

See www.gocorn.net for more accurate nitrogen requirements for corn.

FLAX

OPERATING EXPENSES (costs based on projected yield of 0.77 tonnes/acre)			Sample Costs/ Acre	Your Farm Budget
Expenses for Grain				
Seed	49 kg/ha certified, treated		28.45	
Fertility	45 kg/ha N		21.35	
	crop removal	24 kg/ha P ₂ O ₅ (7.5 kg/tonne removal rate)	8.75	
		18 kg/ha K ₂ O (5.8 kg/tonne removal rate)	6.05	
Herbicide	broadleaf weed control		5.50	
	grass weed control, if required		19.75	
	desiccant		9.50	
Fungicide			–	
Tractor and machine expenses	fuel (26 L) and lubricants		28.60	
	repairs and maintenance		25.45	
Production insurance			8.75	
Custom work	fertilizer application, mixing & delivery		12.00	
	2 pesticide applications		22.00	
	other		–	
Trucking (\$9.00/tonne)			6.95	
Storage			–	
Land rent			–	
Operator labour (self or hired)			12.65	
Interest on operating			3.70	
Total Operating Expenses — Grain			219.45	
Expenses for Straw (costs based on projected yield of 2.21 tonnes/acre)				
Fertility	crop removal	18 kg/ha P ₂ O ₅ (3.2 kg/tonne removal rate)	6.55	
		105 kg/ha K ₂ O (19.0 kg/tonne removal rate)	34.75	
Tractor and machine expenses	fuel (6 L) and lubricants		6.15	
	repairs and maintenance		7.20	
Twine			7.60	
Other			13.90	
Total Operating Expenses — Straw			76.15	
Total Operating Expenses			295.60	
REVENUE				
Expected flax yield _____				
Expected flax price _____				
Total Market Revenue (Yield x Price)				
Program payment				
Total Flax Revenue				
CONTRIBUTION MARGIN (Revenue – Operating Expenses)				
OVERHEAD EXPENSES		Flax Only	Flax & Straw	
Machinery	depreciation	37.65	46.05	
	interest on investment	13.05	15.45	
Land		–	–	
Other overhead		5.65	7.65	
TOTAL EXPENSES		275.80	364.75	
Break-even price on your farm (total expenses/expected yield):				

OATS

OPERATING EXPENSES (costs based on projected yield of 1.26 tonnes/acre (81 bu/acre))			Sample Costs/ Acre	Your Farm Budget
Seed	1.1 million seeds/acre, certified treated		47.00	
Fertility	113 kg/ha N (245 kg/ha Urea)		53.40	
	crop removal	24 kg/ha P ₂ O ₅ (7.5 kg/tonne removal rate)	8.75	
		18 kg/ha K ₂ O (5.8 kg/tonne removal rate)	6.05	
Herbicide	weed control, if required		5.50	
Fungicide			19.65	
Plant growth regulator			14.85	
Tractor and	fuel (26 L) and lubricants		28.60	
machine expenses	repairs and maintenance		25.40	
Production insurance			7.20	
Risk Management Program			10.00	
Marketing board fees (\$1.34/tonne)			1.70	
Custom work	fertilizer application, mixing and delivery		12.00	
	3 pesticide applications		33.00	
Trucking (\$9.00/tonne)			11.35	
Storage			–	
Land rent			–	
Operator labour (self or hired)			12.65	
Interest on operating			4.20	
Total Operating Expenses — Grain			301.30	
Expenses for Straw (costs based on project yield of 2.21 tonnes/acre)				
Fertility	crop removal	18 kg/ha P ₂ O ₅ (3.2 kg/tonne removal rate)	6.55	
		105 kg/ha K ₂ O (19.0 kg/tonne removal rate)	34.75	
Tractor and	fuel (6 L) and lubricants		6.15	
machine expenses	repairs and maintenance		7.20	
Twine			7.60	
Other			13.90	
Total Operating Expenses — Straw			76.15	
Total Operating Expenses			377.45	
REVENUE				
Expected oat yield _____				
Expected oat price _____				
Total Market Revenue (Yield x Price)				
Program payment				
Total Oats Revenue				
Expected straw yield _____				
Expected straw price _____				
Total Straw Revenue (Yield x Price)				
Total Revenue				
CONTRIBUTION MARGIN (Revenue – Operating Expenses)				
OVERHEAD EXPENSES			Oats Only	Oats & Straw
Machinery	depreciation		37.65	46.05
	interest on investment		13.05	15.45
Land			–	–
Other overhead			5.65	7.65
TOTAL EXPENSES			357.65	446.60
Break-even price on your farm (total expenses/expected yield):				

SOYBEANS

OPERATING EXPENSES (costs based on projected yield of 1.28 tonnes/acre (47 bu/acre))			Tillage System			Your Farm Budget
			Non-GMO Soybeans Conventional	Non-GMO Soybeans No-Till	Roundup Ready No-Till	
			Sample Costs/Acre	Sample Costs/Acre	Sample Costs/Acre	
Seed	177,000 seeds/acre in 15-in. rows — drill (165,000 seeds/acre in 15-in. rows — planter)		52.35	52.35	78.15	
Fungicide seed treatment			13.00	13.00	13.00	
Additional seed treatments or inoculants, if required			—	—	—	
Fertility	crop removal	45 kg/ha P ₂ O ₅ (14.0 kg/tonne removal rate)	16.60	16.60	16.60	
		74 kg/ha K ₂ O (23.0 kg/tonne removal rate)	24.40	24.40	24.40	
Herbicide	annual grass and broadleaf weeds		69.90	69.90	14.25	
	burndown		—	12.75	12.75	
	other weed control, if required		—	—	—	
Insecticide/fungicide	if required		—	—	—	
Tractor and machine expenses	fuel (26 L conventional, 17 L no till) and lubricants		28.60	19.10	19.10	
	repairs and maintenance		26.45	14.00	14.00	
Marketing board and Grain Financial Protection fees (\$1.39/tonne)			1.80	1.80	1.80	
Production insurance			8.60	8.60	8.60	
Risk Management Program			3.00	3.00	3.00	
Drying, if required			—	—	—	
Custom work	pesticide applications		11.00	22.00	22.00	
	fertilizer application, mixing and delivery		12.00	12.00	12.00	
Added expense for IP			—	—	—	
Trucking (\$9.00/tonne)			11.50	11.50	11.50	
Storage (\$2.35/month/tonne x 4 months)			12.00	12.00	12.00	
Land rent			—	—	—	
Operator labour (self or hired)			12.65	8.65	8.65	
Interest on operating			5.25	5.20	4.70	
Total Operating Expenses			309.10	306.85	276.50	
REVENUE						
Expected yield _____ (Soybeans following soybeans: 10% soybean yield decrease)						
Expected price _____						
Total Market Revenue (Yield x Price)						
Additional revenue from IP						
Program payment						
Total Revenue						
CONTRIBUTION MARGIN (Revenue – Operating Expenses)						
OVERHEAD EXPENSES						
Machinery	depreciation		38.75	21.05	21.05	
	interest on investment		13.55	6.65	6.65	
Land			—	—	—	
Other overhead			6.00	2.60	2.60	
TOTAL EXPENSES			367.40	337.15	306.80	
Break-even price on your farm (total expenses/expected yield):						

SWITCHBOARD

ESTABLISHMENT EXPENSES (spring wheat costs based on projected yield of 1.33 tonnes/acre (51 bu/acre))			Direct Seeded		Your Farm Budget
			Conventional	No-Till	
			Sample Costs/Acre	Sample Costs/Acre	
Seed	11.25 kg/ha switchgrass		120.00	120.00	
Fertility	nitrogen, if required		–	–	
	crop removal	P ₂ O ₅	–	–	
		K ₂ O	–	–	
Herbicide	annual grass and broadleaf control		12.90	12.90	
	burndown		–	12.75	
	other weed control, if required		–	–	
Insecticide/fungicide	if required		–	–	
Tractor and machine expenses	fuel (13 L conventional, 5 L no till) and lubricants		14.15	5.70	
	repairs and maintenance		18.60	6.10	
Custom work	pesticide applications		11.00	22.00	
	fertilizer applications, mixing and delivery		–	–	
Harvest and trucking (spring wheat)			–	–	
Operator labour (self or hired)			9.40	4.30	
Establishment failure rate			–	–	
Interest on operating			3.05	3.10	
Total Establishment Year Expenses			189.10	186.85	
ANNUAL OPERATING EXPENSES (costs based on projected yield of 4.0 tonnes/acre (4.4 tons/acre))					
Establishment year expenses — over 7 years (less establishment year sales)			40.45	34.65	
Fertility	76 kg/ha nitrogen		36.70	36.70	
	crop removal	P ₂ O ₅	–	–	
		K ₂ O	–	–	
Tractor and machine expenses	fuel (18 L) and lubricants		20.15	20.15	
	repairs and maintenance		31.90	31.90	
Custom work	fertilizer applications, mixing and delivery		12.00	12.00	
Trucking			–	–	
Removal and storage			93.00	93.00	
Twine			–	–	
Operator labour (self or hired)			12.95	12.95	
Interest on operating			4.25	4.15	
Total Annual Operating Expenses			251.40	245.50	
REVENUE					
Expected yield _____					
Expected price _____					
Total Revenue (Yield x Price)					
CONTRIBUTION MARGIN (Revenue – Operating Expenses)					
OVERHEAD EXPENSES					
Machinery	depreciation		44.60	44.60	
	interest on investment		17.35	17.35	
Land			–	–	
Other overhead			9.20	9.20	
TOTAL EXPENSES			322.55	316.65	
Break-even price on your farm (total expenses/expected yield):					

SOFT RED WINTER WHEAT

OPERATING EXPENSES (costs based on projected yield of 2.4 tonnes/acre (87 bu/acre))			Tillage System		Your Farm Budget
			Conventional	No-Till	
			Sample Costs/ Acre	Sample Costs/ Acre	
Expenses for Grain					
Seed	1.4–1.8 million seeds/acre, certified seed		69.45	69.45	
Fertility	135 kg/ha N		64.10	64.10	
	crop	58 kg/ha P ₂ O ₅ (9.8 kg/tonne removal rate)	21.40	21.40	
	removal	35 kg/ha K ₂ O (6.0 kg/tonne removal rate)	11.75	11.75	
Herbicide	broadleaf weeds		10.55	10.55	
Fungicide	fusarium head blight		19.65	19.65	
	leaf disease, if required		10.50	10.50	
Plant growth regulator			14.85	14.85	
Tractor and	fuel (26 L conventional, 17 L no till) and lubricants		28.60	19.10	
machine expenses	repairs and maintenance		24.85	14.00	
Production insurance			10.15	10.15	
Risk Management Program			3.85	3.85	
Marketing board and Grain Financial Protection fees (\$0.81/tonne)			1.90	1.90	
Custom work	fertilizer application, mixing and delivery		12.00	12.00	
	3 pesticide applications		33.00	33.00	
Added expense for IP			–	–	
Trucking (\$9.00/tonne)			21.30	21.30	
Land rent			–	–	
Operator labour (self or hired)			12.65	8.65	
Interest on operating			10.60	9.90	
Total Operating Expenses — Grain			381.15	356.10	
Expenses for Straw (costs based on projected yield of 2.41 tonnes/acre)					
Fertility	crop	10 kg/ha P ₂ O ₅ (1.7 kg/tonne removal rate)	3.80	3.80	
	removal	72 kg/ha K ₂ O (12.0 kg/tonne removal rate)	23.95	23.95	
Tractor and	fuel (6 L) and lubricants		6.15	6.15	
machine expenses	repairs and maintenance		7.20	7.20	
Twine			8.30	8.30	
Other			13.90	13.90	
Total Operating Expenses — Straw			63.30	63.30	
Total Operating Expenses			444.45	419.40	
REVENUE					
Expected wheat yield _____					
Expected wheat price _____					
Total Market Revenue (Yield x Price)					
Additional income from IP _____					
Program payment _____					
Total Wheat Revenue					
Expected straw yield _____					
Expected straw price _____					
Total Straw Revenue (Yield x Price)					
Total Revenue					
CONTRIBUTION MARGIN (Revenue – Operating Expenses)					
OVERHEAD EXPENSES		Conventional Tillage		No-Till	
		Wheat Only	Wheat & Straw	Wheat Only	Wheat & Straw
Machinery	depreciation	37.85	46.25	21.05	29.45
	interest on investment	13.25	15.65	6.65	9.05
Land		–	–	–	–
Other overhead		5.85	7.85	2.65	4.65
TOTAL EXPENSES		438.10	514.20	386.45	462.55
Break-even price on your farm (total expenses/expected yield): _____					

HARD RED WINTER WHEAT

OPERATING EXPENSES (costs based on projected yield of 2.2 tonnes/acre (82 bu/acre))			Tillage System		Your Farm Budget
			Conventional	No-Till	
			Sample Costs/Acre	Sample Costs/Acre	
Expenses for Grain					
Seed	1.4–1.8 million seeds/acre, certified seed		70.65	70.65	
Fertility	165 kg/ha N		78.30	78.30	
	crop	55 kg/ha P ₂ O ₅ (9.8 kg/tonne removal rate)	20.25	20.25	
	removal	34 kg/ha K ₂ O (6.0 kg/tonne removal rate)	11.15	11.15	
Herbicide	broadleaf weeds		10.55	10.55	
	other weed control, if required		–	–	
Fungicide	fusarium head blight		19.65	19.65	
	leaf disease, if required		10.50	10.50	
Plant growth regulator			14.85	14.85	
Tractor and machine expenses	fuel (26 L conventional, 17 L no till) and lubricants		28.60	19.10	
	repairs and maintenance		24.85	14.00	
Production insurance			11.50	11.50	
Risk Management Program			3.65	3.65	
Marketing board and Grain Financial Protection fees (\$0.81/tonne)			1.80	1.80	
Custom work	2 fertilizer applications, mixing and delivery		24.00	24.00	
	3 pesticide applications		33.00	33.00	
Added expense for IP			–	–	
Trucking (\$9.00/tonne)			20.15	20.15	
Land rent			–	–	
Operator labour (self or hired)			12.65	8.65	
Interest on operating			11.35	10.65	
Total Operating Expenses — Grain			407.45	382.40	
Expenses for Straw (costs based on projected yield of 2.41 tonnes/acre)					
Fertility	crop	10 kg/ha P ₂ O ₅ (1.7 kg/tonne removal rate)	3.80	3.80	
	removal	72 kg/ha K ₂ O (12.0 kg/tonne removal rate)	23.95	23.95	
Tractor and machine expenses	fuel (6 L) and lubricants		6.15	6.15	
	repairs and maintenance		7.20	7.20	
Twine			8.30	8.30	
Other			13.90	13.90	
Total Operating Expenses — Straw			63.30	63.30	
Total Operating Expenses			470.75	445.70	
REVENUE					
Expected wheat yield _____					
Expected wheat price _____					
Total Market Revenue (Yield x Price)					
Additional income from IP					
Program payment					
Total Wheat Revenue					
Expected straw yield _____					
Expected straw price _____					
Total Straw Revenue (Yield x Price)					
Total Revenue					
CONTRIBUTION MARGIN (Revenue – Operating Expenses)					
OVERHEAD EXPENSES		Conventional Tillage		No-Till	
		Wheat Only	Wheat & Straw	Wheat Only	Wheat & Straw
Machinery	depreciation	37.85	46.25	21.05	29.45
	interest on investment	13.25	15.65	6.65	9.05
Land		–	–	–	–
Other overhead		5.85	7.85	2.65	4.65
TOTAL EXPENSES		464.40	540.50	412.75	488.85
Break-even price on your farm (total expenses/expected yield):					

HARD RED SPRING WHEAT

OPERATING EXPENSES (costs based on projected yield of 1.5 tonnes/acre (56.0 bu/acre))			Sample Costs/ Acre	Your Farm Budget
Expenses for Grain				
Seed	1.4–1.6 million seeds/acre, certified seed		70.90	
Fertility	101 kg/ha N (220 kg/ha Urea)		42.70	
	crop removal	37 kg/ha P ₂ O ₅ (9.8 kg/tonne removal rate)	13.85	
		23 kg/ha K ₂ O (6.0 kg/tonne removal rate)	7.60	
Herbicide	broadleaf weeds		10.55	
	grass or wild oat control, if required		–	
	other weed control, if required		–	
Fungicide	fusarium head blight		19.65	
Tractor and machine expenses	fuel (26 L) and lubricants		28.60	
	repairs and maintenance		25.45	
Production insurance			9.25	
Risk Management Program			4.90	
Marketing board and Grain Financial Protection fees (\$0.81/tonne)			1.25	
Custom work	fertilizer application, mixing and delivery		12.00	
	2 pesticide applications		22.00	
	other		–	
Added expense for IP			–	
Trucking (\$9.00/tonne)			13.80	
Land rent			–	
Operator labour (self or hired)			12.65	
Interest on operating			5.10	
Total Operating Expenses — Grain			300.25	
Expenses for Straw (costs based on projected yield of 2.14 tonnes/acre)				
Fertility	crop removal	9 kg/ha P ₂ O ₅ (1.7 kg/tonne removal rate)	3.35	
		64 kg/ha K ₂ O (12.0 kg/tonne removal rate)	21.25	
Tractor and machine expenses	fuel (6 L) and lubricants		6.15	
	repairs and maintenance		7.20	
Twine			7.35	
Other			13.90	
Total Operating Expenses — Straw			59.20	
Total Operating Expenses			359.45	
REVENUE				
Expected wheat yield _____				
Expected wheat price _____				
Total Market Revenue (Yield x Price)				
Additional income from IP				
Program payment				
Total Wheat Revenue				
Expected straw yield _____				
Expected straw price _____				
Total Straw Revenue (Yield x Price)				
Total Revenue				
CONTRIBUTION MARGIN (Revenue – Operating Expenses)				
OVERHEAD EXPENSES		Wheat Only	Wheat & Straw	
Machinery	depreciation	37.65	46.05	
	interest on investment	13.05	15.45	
Land		–	–	
Other overhead		5.65	7.65	
TOTAL EXPENSES		356.60	428.60	
Break-even price on your farm (total expenses/expected yield):				

WHITE/BLACK BEANS

OPERATING EXPENSES (costs based on projected yield of 22 cwt/acre)			Sample Costs/ Acre	Your Farm Budget
Seed	125,000–150,000 seeds/acre (67-78 kg/ha, 15–20-in. rows) certified, treated seed (with fungicide plus Cruiser insecticide)		88.40	
Fertility	40 kg/ha N		19.00	
	crop removal	30 kg/ha P ₂ O ₅ (14.0 kg/tonne removal rate)	11.15	
		30 kg/ha K ₂ O (14.0 kg/tonne removal rate)	9.95	
Herbicide	annual grass and broadleaf weeds		69.15	
Crop pre-harvest			8.00	
Fungicide, if required	white mould		44.70	
	anthracnose		8.50	
Insecticide			–	
Tractor and machine expenses	fuel (34 L) and lubricants		37.45	
	repairs and maintenance		28.40	
Marketing board fees (\$6.80/tonne)			6.80	
Production insurance			16.95	
Risk Management Program			1.30	
Custom work	fertilizer application, mixing and delivery		12.00	
	5 pesticide applications		55.00	
Trucking (\$9.00/tonne)			9.00	
Drying			–	
Land rent			–	
Operator labour (self or hired)			18.60	
Interest on operating			7.65	
Total Operating Expenses			452.00	
REVENUE				
Expected yield _____				
Expected price _____				
Total Market Revenue (Yield x Price)				
Less pick charges (typically 2%–4%)				
Program payment				
Total Revenue				
CONTRIBUTION MARGIN (Revenue – Operating Expenses)				
OVERHEAD EXPENSES				
Machinery	depreciation		43.90	
	interest on investment		14.30	
Land			–	
Other overhead			5.40	
TOTAL EXPENSES			515.60	
Break-even price on your farm (total expenses/expected yield):				

ORGANIC — GRAIN CORN AND SOYBEANS*

OPERATING EXPENSES (costs based on projected yield of 3.05 tonnes/acre (120 bu/acre) grain corn; 1.0 tonnes/acre (36.70 bu/acre) soybeans)		Grain Corn	Soybeans	Your Farm Budget
		Sample Costs/ Acre	Sample Costs/ Acre	
Seed	grain corn: 32,000 kernels, certified, organic; soybeans: 200,000 seeds/acre, certified, organic in 21–30-in. rows	108.15	70.00	
Seed inoculant		–	6.40	
Fertility	manure, compost**	100.00	–	
	dry fertilizer	50.00	50.00	
Herbicide		–	–	
Insecticide		–	–	
Fungicide		–	–	
Soil maintenance (cover crop, fallow etc.)**		40.00	20.00	
Tractor and machine expenses	fuel (37 L corn, 39 L soybeans) and lubricants	40.70	43.35	
	repairs and maintenance	34.50	43.70	
Marketing board and Grain Financial Protection fees (\$0.401/tonne (corn), \$1.39/tonne (soybeans))		1.20	1.40	
Certification fees		3.75	3.75	
Production insurance		18.90	18.10	
Risk Management Program		4.75	2.35	
Custom work		–	–	
Added expense for handling organic crops		–	–	
Trucking (\$9.00/tonne corn, \$9.00/tonne soybeans)		27.45	9.00	
Drying (\$21.90/tonne corn)		66.75	–	
Storage		9.00	9.00	
Land rent		–	–	
Operator labour (self or hired)		20.35	21.65	
Labour — hand weed		–	–	
Interest on operating		9.05	5.15	
Total Operating Expenses		534.55	303.85	
REVENUE				
Expected yield	_____			
Expected price	_____			
Total Market Revenue (Yield x Price)				
Program payment				
Total Revenue				
CONTRIBUTION MARGIN (Revenue – Operating Expenses)				
OVERHEAD EXPENSES				
Machinery	depreciation	50.90	65.00	
	interest on investment	16.90	23.40	
Land		–	–	
Other overhead		6.70	10.90	
TOTAL EXPENSES		609.05	403.15	
Break-even price on your farm (total expenses/expected yield):				

* Organic budget estimates do not include transition period costs.

** Manure, compost and cover crop estimates are highly variable, depending on individual farm situations.

ORGANIC — WINTER WHEAT AND SPELT*

OPERATING EXPENSES (costs based on projected yield of 1.50 tonnes/acre (55 bu/acre) wheat; 1.09 tonnes/acre spelt)		Winter Wheat Sample Costs/Acre	Spelt Sample Costs/Acre	Your Farm Budget	
Seed	wheat: 1.5–1.7 million seeds/acre, certified, organic; spelt: 180 kg/ha certified, organic	108.00	134.20		
Fertility	manure, compost**	100.00	100.00		
	dry fertilizer	50.00	50.00		
Herbicide		–	–		
Fungicide		–	–		
Soil maintenance (cover crop, fallow, etc.)**		40.00	40.00		
Tractor and	fuel (30 L) and lubricants	33.15	33.15		
machine expenses	repairs and maintenance	27.10	27.10		
Production insurance		31.00	21.20		
Risk Management Program		2.45	–		
Marketing board and Grain Financial Protection fee (\$0.81/tonne (wheat))		1.20	–		
Certification fees		3.75	3.75		
Custom work		–	–		
Added expense for handling organic crops		–	–		
Trucking (\$9.00/tonne)		13.45	9.85		
Storage		9.00	9.00		
Land rent		–	–		
Operator labour (self or hired)		16.05	16.05		
Labour — hand weed					
Interest on operating		12.45	12.70		
Total Operating Expenses — Grain		447.60	457.00		
Expenses for Straw (costs based on projected yield of 2.41 tonnes/acre)					
Tractor and	fuel (6 L) and lubricants	6.15	6.15		
machine expenses	repairs and maintenance	7.20	7.20		
Twine		8.30	8.30		
Other		13.90	13.90		
Total Operating Expenses — Straw		35.55	35.55		
Total Operating Expenses		483.15	492.55		
REVENUE					
Expected yield _____					
Expected price _____					
Total Market Revenue (Yield x Price)					
Program payment _____					
Total Revenue					
Expected straw yield _____					
Expected straw price _____					
Total Straw Revenue (Yield x Price)					
Total Revenue					
CONTRIBUTION MARGIN (Revenue – Operating Expenses)					
OVERHEAD EXPENSES		Wheat Only	Wheat & Straw	Spelt Only	Spelt & Straw
Machinery	depreciation	42.10	50.50	42.10	50.50
	interest on investment	14.30	16.70	14.30	16.70
Land		–	–	–	–
Other overhead		6.45	8.45	6.45	8.45
TOTAL EXPENSES		510.45	558.80	519.85	568.20
Break-even price on your farm (total expenses/expected yield):					

* Organic budget estimates do not include transition period costs.

** Manure, compost and cover crop cost estimates are highly variable, depending on individual farm situations.

ORGANIC — BARLEY AND OATS *

OPERATING EXPENSES (costs based on projected yield of 1.2 tonnes/acre (56 bu/acre) barley; 1.0 tonnes/acre (65 bu/acre) oats)		Barley	Oats	Your Farm Budget	
		Sample Costs/Acre	Sample Costs/Acre		
Expenses for Grain					
Seed	barley: 168 kg/ha certified, organic oats: 157 kg/ha certified, organic	95.45	84.00		
Fertility	manure/compost** dry fertilizer	— 50.00	— 50.00		
Herbicide		—	—		
Fungicide		—	—		
Soil maintenance (cover crop, fallow etc.)**		40.00	40.00		
Tractor and machine expenses	fuel (30 L) and lubricants repairs and maintenance	33.15 28.65	33.15 28.65		
Production insurance		7.20	7.20		
Risk Management Program		9.70	8.00		
Marketing board fee (\$1.19/tonne (barley), \$1.34/tonne (oats))		1.45	1.35		
Certification fees		3.75	3.75		
Custom work		—	—		
Added expense for handling organic crops		—	—		
Trucking (\$9.00/tonne)		10.95	9.05		
Storage		9.00	9.00		
Land rent		—	—		
Operator labour (self or hired)		16.05	16.05		
Labour — hand weed		—	—		
Interest on operating		8.75	8.30		
Total Operating Expenses — Grain		314.10	298.50		
Expenses for Straw (costs based on projected yield of 1.89 tonnes/acre (barley), 2.21 tonnes/acre (oats))					
Tractor and machine expenses	fuel (6 L) and lubricants repairs and maintenance	6.15 7.20	6.15 7.20		
Twine		6.50	7.60		
Other		13.90	13.90		
Total Operating Expenses — Straw		33.75	34.85		
Total Operating Expenses		347.85	333.35		
REVENUE					
Expected yield _____					
Expected price _____					
Total Market Revenue (Yield x Price)					
Program payment					
Total Revenue					
Expected straw yield _____					
Expected straw price _____					
Total Straw Revenue (Yield x Price)					
Total Revenue					
CONTRIBUTION MARGIN (Revenue – Operating Expenses)					
OVERHEAD EXPENSES		Barley Only	Barley & Straw	Oats Only	Oats & Straw
Machinery	depreciation	40.50	48.90	40.50	48.90
	interest on investment	13.20	15.60	13.20	15.60
Land		—	—	—	—
Other overhead		5.05	7.05	5.05	7.05
TOTAL EXPENSES		372.85	419.40	357.25	404.90
Break-even price on your farm (total expenses/expected yield):					

* Organic budget estimates do not include transition period costs.

** Manure, compost and cover crop cost estimates are highly variable, depending on individual farm situations.

OMAFRA RESOURCES

Selected Factsheets and Publications

Agronomy Guide for Field Crops, Publication 811

Budgeting Farm Machinery Costs

Field Crop Protection Guide, Publication 812

Guide to Custom Farmwork and Short-Term Equipment Rental

Guide to Weed Control Field Crops

Soil Fertility Handbook, Publication 611

Ontario Farm Record Book, Publication 540

To obtain a digital copy of this publication, visit ontario.ca and search for the publication number and title.

To obtain print copies of this or any other OMAFRA publication, please order:

- online at ontario.ca/publications

OMAFRA has excellent tools and information to help manage your farm business in the Agricultural Business Management section at ontario.ca/agbusiness. For results of the Custom Farmwork and Equipment Rental Rates survey, go to ontario.ca/agbusiness and search for “Ontario cost of production and budgets.” The *Ontario Enterprise Budgets*, also found on the OMAFRA website, has budgets for cost of production, including field crops. You can download a Budgeting Tool Excel file, modify the numbers to reflect your operation, and the file will complete the calculations. The Budgeting Tool also lets you assess the potential effect of production and marketing risk factors and risk management strategies.

Publication 60, *Field Crop Budgets*, is updated by John Molenhuis, Business Analysis and Cost of Production Specialist, OMAFRA, Brighton (john.molenhuis@ontario.ca), and the OMAFRA Field Crops Unit.

METRIC CONVERSION TABLES**Application rate conversions (approximate)****Metric to Imperial**

litres per hectare × 0.09 = gallons per acre
litres per hectare × 0.36 = quarts per acre
litres per hectare × 0.71 = pints per acre
millilitres per hectare × 0.015 = fluid ounces per acre
grams per hectare × 0.015 = ounces per acre
kilograms per hectare × 0.89 = pounds per acre
tonnes per hectare × 0.45 = tons per acre

Imperial to metric

gallons per acre × 11.23 = litres per hectare (L/ha)
quarts per acre × 2.8 = litres per hectare (L/ha)
pints per acre × 1.4 = litres per hectare (L/ha)
fluid ounces per acre × 70 = millilitres per hectare (mL/ha)
tons per acre × 2.24 = tonnes per hectare (t/ha)
pounds per acre × 1.12 = kilograms per hectare (kg/ha)
ounces per acre × 70 = grams per hectare (g/ha)

Liquid equivalents

litres/hectare	approximate gallons/acre
50 L/ha = 5 gal/acre	
100 L/ha = 10 gal/acre	
150 L/ha = 15 gal/acre	
200 L/ha = 20 gal/acre	
250 L/ha = 25 gal/acre	
300 L/ha = 30 gal/acre	

Dry weight equivalents

grams or kilograms/hectare	ounces or pounds/acre
100 g/ha = 1½ oz/acre	
200 g/ha = 3 oz/acre	
300 g/ha = 4¼ oz/acre	
500 g/ha = 7 oz/acre	
700 g/ha = 10 oz/acre	
1.10 kg/ha = 1 lb/acre	
1.50 kg/ha = 1¼ lb/acre	
2.00 kg/ha = 1¾ lb/acre	
2.50 kg/ha = 2¼ lb/acre	
3.25 kg/ha = 3 lb/acre	
4.00 kg/ha = 3½ lb/acre	
5.00 kg/ha = 4½ lb/acre	
6.00 kg/ha = 5¼ lb/acre	
7.50 kg/ha = 6¾ lb/acre	
9.00 kg/ha = 8 lb/acre	
11.00 kg/ha = 10 lb/acre	
13.00 kg/ha = 11½ lb/acre	
15.00 kg/ha = 13½ lb/acre	

Handy metric conversion factor

litres per hectare × 0.4 = litres per acre
kilograms per hectare × 0.4 = kilograms per acre

**Conversion tables —
imperial to metric (approximate)**

Area	Volume (dry)	Volume (liquid)	Weight
1 square foot = 0.09 m ²	1 cubic yard = 0.76 m ³	1 fluid ounce (imp.) = 28.41 mL	1 ounce = 28.35 g
1 square yard = 0.84 m ²	1 bushel = 36.37 L	1 pint (imp.) = 0.57 L	1 pound = 453.6 g
1 acre = 0.40 ha		1 gallon (imp.) = 4.55 L	1 ton = 0.91 tonne
		1 gallon (U.S.) = 3.79 L	



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