



Publication 60
**Field Crop
Budgets**
2022

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 22 for metric and imperial conversions.

Front cover: Field of soybeans mid-season.

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

CONTENTS

- 2022 Field Crop Budgets 1
- 2022 Crop Comparison Summary Table for Selected Field Crops 2
- Crop Budgets**
- Alfalfa-timothy hay 3
- Barley 4
- Spring canola (herbicide tolerant) 5
- Winter canola 6
- Coloured beans 7
- Grain corn 8
- Silage corn 9
- Flax 10
- Oats 11
- Soybeans 12
- Switchgrass 13
- Soft red winter wheat 14
- Hard red winter wheat 15
- Hard red spring wheat 16
- White/black beans 17
- Organic — grain corn and soybeans 18
- Organic — winter wheat and spelt 19
- Organic — barley and oats 20
- OMAFRA Resources 21
- Metric Conversion Tables 22

2022 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.

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.

2022 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	114.25	84.75	50.65	82.15	137.05	101.40	70.10	47.00	70.90
Seed treatment	1.60	–	13.00	13.00	–	–	–	–	–
Fertility	200.45	151.30	64.10	64.10	63.30	63.30	146.90	100.45	96.90
Pesticides	26.80	56.15	82.65	27.05	125.55	134.50	40.70	25.15	30.20
Total Inputs	343.10	292.20	210.40	186.30	325.90	299.20	257.70	172.60	198.00
Tillage	64.75	57.35	–	–	99.30	62.70	–	57.35	57.35
Planting	25.40	22.60	26.65	26.65	25.30	30.30	27.65	22.30	22.30
Spraying	11.10	33.35	22.20	22.20	44.45	55.55	33.35	33.35	22.20
Fertilizing	12.10	12.10	12.10	12.10	12.10	12.10	12.10	12.10	12.10
Harvesting & trucking	91.20	52.80	59.10	59.10	121.15	68.20	68.00	57.90	60.40
Total Machinery	204.55	178.20	120.05	120.05	302.30	228.85	141.10	183.00	174.35
Drying	96.80	–	–	–	–	–	–	–	–
Production insurance	15.75	19.55	10.25	10.25	26.35	19.00	12.50	10.05	12.55
Risk management	6.90	10.35	3.00	3.00	0.20	1.30	3.85	10.00	4.90
Interest @ 3.45%	11.25	7.85	5.65	5.25	9.10	8.50	11.50	4.50	5.80
Marketing & other	43.35	4.00	13.80	13.80	5.90	6.50	1.90	1.70	1.25
Total Costs	721.70	512.15	363.15	338.65	669.75	563.35	428.55	381.85	396.85
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:

Market and input prices projected were as of November 2021. Given the variability of the markets expected for 2022, it is important to use current prices. Use the following tools to determine your cost of production:

- 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		90.60	
Other seed (timothy)	4.48 kg/ha		17.95	
Inoculant			1.05	
Fertility	crop removal	24 kg/ha P ₂ O ₅ (6.1 kg/tonne removal rate)	16.50	
		92 kg/ha K ₂ O (23.5 kg/tonne removal rate)	41.25	
Herbicide	broadleaf weed control		15.95	
Production insurance			4.40	
Tractor and machine expenses	fuel (37 L) and lubricants		44.10	
	repairs		42.15	
Custom work	2 pesticide applications		22.20	
	2 fertilizer applications, mixing and delivery		24.20	
	bale wrapping — plastic — 50% yield		42.40	
Twine			2.50	
Operator labour (self or hired)			29.00	
Interest			12.60	
Total Establishment Year Expenses			406.85	
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)	32.90	
		183 kg/ha K ₂ O (applied in fall) (23.5 kg/tonne removal rate)	82.20	
Tractor and machine expenses	fuel (26 L) and lubricants		30.60	
	repairs		32.60	
Twine			4.95	
Production insurance			24.40	
Custom work	2 fertilizer applications, mixing and delivery		24.20	
	bale wrapping — plastic		84.80	
Other costs			-	
Land rent			-	
Operator labour (self or hired)			29.95	
Interest on operating			6.40	
Total Annual Operating Expenses			358.65	
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			414.30	
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		51.25	51.25		
Fertility	113 kg/ha N (246 kg/ha Urea (Northern Ontario — Feed))		76.15	–		
	90 kg/ha N (196 kg/ha Urea (Southern Ontario — Feed))		60.65	–		
	56 kg/ha N (122 kg/ha Urea (Eastern Ontario — Feed))		37.75	–		
	45–67 kg/ha N (98–146 kg/ha Urea (Malting))		–	37.75		
	crop	30 kg/ha P ₂ O ₅ (8.0 kg/tonne removal rate)	21.15	21.15		
	removal	24 kg/ha K ₂ O (6.3 kg/tonne removal rate)	10.70	10.70		
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		31.20	31.20		
	repairs and maintenance		25.95	25.95		
Production insurance			10.05	10.05		
Risk Management Program			12.10	12.10		
Marketing board fees (\$1.19/tonne)			1.80	1.80		
Custom work	fertilizer application, mixing and delivery		12.10	12.10		
	2 pesticide application		22.20	22.20		
	other		–	–		
Trucking (\$9.10/tonne)			13.90	13.90		
Storage			–	–		
Quality testing			–	–		
Land rent			–	–		
Operator labour (self or hired)			13.15	13.15		
Interest on operating			7.40	7.05		
Total Operating Expenses — Grain (Feed (average of 3 regions))			330.95	310.15		
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)	8.50	8.50		
	removal	94 kg/ha K ₂ O (20.0 kg/tonne removal rate)	42.45	42.45		
Tractor and machine expenses	fuel (6 L) and lubricants		6.70	6.70		
	repairs and maintenance		7.30	7.30		
Twine			8.30	8.30		
Other			14.45	14.45		
Total Operating Expenses — Straw			87.75	87.75		
Total Operating Expenses			418.70	397.90		
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			387.30	487.85	366.50	467.05
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	84.75	
Fertility	114 kg/ha N (197 kg/ha urea + 112 kg/ha ammonium sulphate) ¹	95.50	
	crop removal	42.35	
	61 kg/ha P ₂ O ₅ (24.5 kg/tonne removal rate) 30 kg/ha K ₂ O (12.0 kg/tonne removal rate)	13.45	
Herbicide	grass and broadleaf weed control	11.90	
Technology use agreement		-	
Insecticide	if required (swede midge)	23.25	
Fungicide	if required	21.00	
Tractor and machine expenses	fuel (30 L) and lubricants	36.50	
	repairs and maintenance	22.65	
Marketing board and Grain Financial Protection fees (\$4.00/tonne)		4.00	
Production insurance		19.55	
Risk Management Program		10.35	
Custom work	fertilizer application, mixing and delivery	12.10	
	3 pesticide applications	33.35	
	other	-	
Trucking (\$9.10/tonne)		9.10	
Storage		-	
Land rent		-	
Operator labour (self or hired)		16.15	
Interest on operating		7.85	
Total Operating Expenses		463.80	
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		513.05	
Break-even price on your farm (total expenses/expected yield):			

¹ Nitrogen rate is based on nitrogen price of \$1.69/kg (\$0.77/lb) N and a canola price of \$750/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**	202 kg/ha N (388 kg/ha urea + 112 kg/ha ammonium sulphate) ¹	154.80	
	crop removal	55.20	
	80 kg/ha P ₂ O ₅ (24.5 kg/tonne removal rate) 39 kg/ha K ₂ O (12.0 kg/tonne removal rate)	17.55	
Herbicide	volunteer cereal control	11.85	
Insecticide	if required (cabbage seedpod weevil)	23.25	
Fungicide	if required	21.00	
Tractor and machine expenses	fuel (24 L), lubricants	29.00	
	repairs and maintenance	16.55	
Marketing board and Grain Financial Protection fees (\$4.00/tonne)		5.20	
Production insurance		19.55	
Risk Management Program		13.45	
Custom work	fertilizer application, mixing and delivery	12.10	
	3 pesticide applications	33.35	
	other	–	
Trucking (\$9.10/tonne)		11.85	
Storage		–	
Land rent		–	
Operator labour (self or hired)		12.55	
Interest on operating		8.85	
Total Operating Expenses		521.40	
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		555.35	
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 0.91 tonnes/acres (20 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)	137.05	
Fertility	40 kg/ha N	26.95	
	crop removal	32 kg/ha P ₂ O ₅ (14.0 kg/tonne removal rate)	22.05
		32 kg/ha K ₂ O (14.0 kg/tonne removal rate)	14.30
Herbicide	annual grass and broadleaf weeds	72.85	
	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	54.00	
	repairs and maintenance	49.65	
Marketing board fees (\$6.50/tonne)		5.90	
Production insurance		26.35	
Risk Management Program		0.20	
Custom work	fertilizer application, mixing and delivery	12.10	
	4 pesticide applications	44.45	
Trucking (\$9.10/tonne)		8.30	
Drying		–	
Land rent		–	
Operator labour (self or hired)		26.10	
Interest on operating		9.10	
Total Operating Expenses		562.05	
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		671.05	
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	114.75	–	114.75	
	32,000 kernels — treated — Bt	101.45	–	101.45	
	32,000 kernels — treated — multi-trait	126.60	–	126.60	
	32,000 kernels — treated — non-GMO	–	88.55	–	
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.)	120.40	120.40	120.40	
	crop removal 80 kg/ha P ₂ O ₅ (7.25 kg/tonne removal rate)	55.65	55.65	55.65	
	54 kg/ha K ₂ O (4.9 kg/tonne removal rate)	24.40	24.40	24.40	
Herbicide	annual grass and broadleaf weed	26.80	31.55	26.80	
	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	41.25	41.25	22.55	
	repairs and maintenance	26.20	26.20	15.45	
Marketing board and Grain Financial Protection fees (\$0.401/tonne)		1.75	1.75	1.75	
Production insurance		15.75	15.75	15.75	
Risk Management Program		6.90	6.90	6.90	
Custom work	fertilizer application, mixing and delivery	12.10	12.10	12.10	
	pesticide applications	11.10	11.10	22.20	
	other	–	–	–	
Trucking (\$9.10/tonne)		41.30	41.30	41.30	
Drying (\$21.90/tonne, 8 points)		96.80	96.80	96.80	
Land rent		–	–	–	
Operator labour (self or hired)		15.90	15.90	8.30	
Storage (\$2.35/tonne/month x 4 months)		41.60	41.60	41.60	
Interest on operating		11.25	10.90	11.00	
Total Operating Expenses		665.00	643.70	650.20	
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		721.70	700.40	682.60	
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 \$1.74/kg and corn price of \$252/tonne (\$6.40/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		116.35	
Insecticide seed treatment, if required			1.60	
Fertility ¹	173 kg/ha N (618 kg/ha of 28-0-0 U.A.N.)		120.40	
	crop	120 kg/ha P ₂ O ₅ (5.5 kg/tonne removal rate)	83.10	
	removal	254 kg/ha K ₂ O (11.7 kg/tonne removal rate)	114.10	
Herbicide	annual grass and broadleaf weeds		26.80	
	other weed control, if required		-	
Insecticide/fungicide	if required		-	
Tractor and machine expenses	fuel (18 L) and lubricants		21.45	
	repairs and maintenance		18.85	
Silo repair and maintenance			-	
Production insurance			15.75	
Silage inoculant			-	
Custom work	fertilizer application, mixing and delivery		12.10	
	pesticide applications		11.10	
	harvest		90.00	
Land rent			-	
Operator labour (self or hired)			9.30	
Interest on operating			11.05	
Total Operating Expenses			651.95	
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			693.60	
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 \$1.74/kg and corn price of \$252/tonne (\$6.40/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		26.60	
Fertility	45 kg/ha N		30.35	
	crop removal	24 kg/ha P ₂ O ₅ (7.5 kg/tonne removal rate)	16.40	
		18 kg/ha K ₂ O (5.8 kg/tonne removal rate)	8.20	
Herbicide	broadleaf weed control		5.50	
	grass weed control, if required		19.80	
	desiccant		9.50	
Fungicide			-	
Tractor and machine expenses	fuel (26 L) and lubricants		31.20	
	repairs and maintenance		25.95	
Production insurance			12.95	
Custom work	fertilizer application, mixing & delivery		12.10	
	2 pesticide applications		22.20	
	other		-	
Trucking (\$9.10/tonne)			7.05	
Storage			-	
Land rent			-	
Operator labour (self or hired)			13.15	
Interest on operating			4.15	
Total Operating Expenses — Grain			245.10	
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)	12.25	
		105 kg/ha K ₂ O (19.0 kg/tonne removal rate)	47.15	
Tractor and machine expenses	fuel (6 L) and lubricants		6.70	
	repairs and maintenance		7.30	
Twine			9.70	
Other			14.45	
Total Operating Expenses — Straw			97.55	
Total Operating Expenses			342.65	
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			301.45	411.80
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)		75.85	
	crop removal	24 kg/ha P ₂ O ₅ (7.5 kg/tonne removal rate)	16.40	
		18 kg/ha K ₂ O (5.8 kg/tonne removal rate)	8.20	
Herbicide	weed control, if required		5.50	
Fungicide			19.65	
Plant growth regulator			14.85	
Tractor and machine expenses	fuel (26 L) and lubricants		31.20	
	repairs and maintenance		25.95	
Production insurance			10.05	
Risk Management Program			10.00	
Marketing board fees (\$1.34/tonne)			1.70	
Custom work	fertilizer application, mixing and delivery		12.10	
	3 pesticide applications		33.35	
Trucking (\$9.10/tonne)			11.50	
Storage			-	
Land rent			-	
Operator labour (self or hired)			13.15	
Interest on operating			4.50	
Total Operating Expenses — Grain			340.95	
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)	12.25	
		105 kg/ha K ₂ O (19.0 kg/tonne removal rate)	47.15	
Tractor and machine expenses	fuel (6 L) and lubricants		6.70	
	repairs and maintenance		7.30	
Twine			9.70	
Other			14.45	
Total Operating Expenses — Straw			97.55	
Total Operating Expenses			438.50	
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			397.30	507.65
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)		50.65	50.65	82.15	
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)	31.05	31.05	31.05	
		74 kg/ha K ₂ O (23.0 kg/tonne removal rate)	33.05	33.05	33.05	
Herbicide	annual grass and broadleaf weeds		69.90	69.90	14.30	
	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		31.20	20.80	20.80	
	repairs and maintenance		27.00	14.40	14.40	
Marketing board and Grain Financial Protection fees (\$1.39/tonne)			1.80	1.80	1.80	
Production insurance			10.25	10.25	10.25	
Risk Management Program			3.00	3.00	3.00	
Drying, if required			—	—	—	
Custom work	pesticide applications		11.10	22.20	22.20	
	fertilizer application, mixing and delivery		12.10	12.10	12.10	
Added expense for IP			—	—	—	
Trucking (\$9.10/tonne)			11.65	11.65	11.65	
Storage (\$2.35/month/tonne x 4 months)			12.00	12.00	12.00	
Land rent			—	—	—	
Operator labour (self or hired)			13.15	9.00	9.00	
Interest on operating			5.70	5.65	5.25	
Total Operating Expenses			336.60	333.25	308.75	
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			394.90	363.55	339.05	
Break-even price on your farm (total expenses/expected yield):						

SWITCHGRASS

			Direct Seeded		Your Farm Budget
			Conventional	No-Till	
			Sample Costs/Acre	Sample Costs/Acre	
ESTABLISHMENT EXPENSES					
Seed	11.25 kg/ha switchgrass		160.00	160.00	
Fertility	nitrogen, if required		–	–	
	crop removal	P ₂ O ₅	–	–	
		K ₂ O	–	–	
Herbicide	annual grass and broadleaf control		13.80	13.80	
	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		15.40	6.20	
	repairs and maintenance		18.85	6.20	
Custom work	pesticide applications		11.10	22.20	
	fertilizer applications, mixing and delivery		–	–	
Harvest and trucking (spring wheat)			–	–	
Operator labour (self or hired)			9.80	4.45	
Establishment failure rate			–	–	
Interest on operating			3.80	3.80	
Total Establishment Year Expenses			232.75	229.40	
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)			48.00	42.00	
Fertility	76 kg/ha nitrogen		52.10	52.10	
	crop removal	P ₂ O ₅	–	–	
		K ₂ O	–	–	
Tractor and machine expenses	fuel (18 L) and lubricants		21.95	21.95	
	repairs and maintenance		32.25	32.25	
Custom work	fertilizer applications, mixing and delivery		12.10	12.10	
Trucking			–	–	
Removal and storage			93.00	93.00	
Twine			–	–	
Operator labour (self or hired)			13.50	13.50	
Interest on operating			4.70	4.60	
Total Annual Operating Expenses			270.45	264.35	
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			348.75	342.65	
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		70.10	70.10	
Fertility	135 kg/ha N		91.00	91.00	
	crop removal	58 kg/ha P ₂ O ₅ (9.8 kg/tonne removal rate)	39.95	39.95	
		35 kg/ha K ₂ O (6.0 kg/tonne removal rate)	15.95	15.95	
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 machine expenses	fuel (26 L conventional, 17 L no till) and lubricants		31.20	20.80	
	repairs and maintenance		25.35	14.40	
Production insurance			12.50	12.50	
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		12.10	12.10	
	3 pesticide applications		33.35	33.35	
Added expense for IP			–	–	
Trucking (\$9.10/tonne)			21.55	21.55	
Land rent			–	–	
Operator labour (self or hired)			13.15	9.00	
Interest on operating			12.25	11.50	
Total Operating Expenses — Grain			439.75	413.50	
Expenses for Straw (costs based on projected yield of 2.41 tonnes/acre)					
Fertility	crop removal	10 kg/ha P ₂ O ₅ (1.7 kg/tonne removal rate)	7.10	7.10	
		72 kg/ha K ₂ O (12.0 kg/tonne removal rate)	32.45	32.45	
Tractor and machine expenses	fuel (6 L) and lubricants		6.70	6.70	
	repairs and maintenance		7.30	7.30	
Twine			10.60	10.60	
Other			14.45	14.45	
Total Operating Expenses — Straw			78.60	78.60	
Total Operating Expenses			518.35	492.10	
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		496.70	588.10	443.85	535.25
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		71.00	71.00	
Fertility	165 kg/ha N		111.20	111.20	
	crop removal	55 kg/ha P ₂ O ₅ (9.8 kg/tonne removal rate)	37.80	37.80	
		34 kg/ha K ₂ O (6.0 kg/tonne removal rate)	15.10	15.10	
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		31.20	20.80	
	repairs and maintenance		25.35	14.40	
Production insurance			13.90	13.90	
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		24.20	24.20	
	3 pesticide applications		33.35	33.35	
Added expense for IP			–	–	
Trucking (\$9.10/tonne)			20.40	20.40	
Land rent			–	–	
Operator labour (self or hired)			13.15	9.00	
Interest on operating			13.10	12.35	
Total Operating Expenses — Grain			470.75	444.50	
Expenses for Straw (costs based on projected yield of 2.41 tonnes/acre)					
Fertility	crop removal	10 kg/ha P ₂ O ₅ (1.7 kg/tonne removal rate)	7.10	7.10	
		72 kg/ha K ₂ O (12.0 kg/tonne removal rate)	32.45	32.45	
Tractor and machine expenses	fuel (6 L) and lubricants		6.70	6.70	
	repairs and maintenance		7.30	7.30	
Twine			10.60	10.60	
Other			14.45	14.45	
Total Operating Expenses — Straw			78.60	78.60	
Total Operating Expenses			549.35	523.10	
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		527.70	619.10	474.85	566.25
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)		60.65	
	crop removal	37 kg/ha P ₂ O ₅ (9.8 kg/tonne removal rate)	25.90	
		23 kg/ha K ₂ O (6.0 kg/tonne removal rate)	10.35	
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		31.20	
	repairs and maintenance		25.95	
Production insurance			12.55	
Risk Management Program			4.90	
Marketing board and Grain Financial Protection fees (\$0.81/tonne)			1.25	
Custom work	fertilizer application, mixing and delivery		12.10	
	2 pesticide applications		22.20	
	other		–	
Added expense for IP			–	
Trucking (\$9.10/tonne)			13.95	
Land rent			–	
Operator labour (self or hired)			13.15	
Interest on operating			5.80	
Total Operating Expenses — Grain			341.05	
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)	6.30	
		64 kg/ha K ₂ O (12.0 kg/tonne removal rate)	28.80	
Tractor and machine expenses	fuel (6 L) and lubricants		6.70	
	repairs and maintenance		7.30	
Twine			9.40	
Other			14.45	
Total Operating Expenses — Straw			72.95	
Total Operating Expenses			414.00	
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			397.40	483.15
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)	101.40	
Fertility	40 kg/ha N	26.95	
	crop removal	32 kg/ha P ₂ O ₅ (14.0 kg/tonne removal rate)	22.05
		32 kg/ha K ₂ O (14.0 kg/tonne removal rate)	14.30
Herbicide	annual grass and broadleaf weeds	72.85	
Crop pre-harvest		8.00	
Fungicide, if required	white mould	44.70	
	anthracnose	8.95	
Insecticide		–	
Tractor and machine expenses	fuel (34 L) and lubricants	40.85	
	repairs and maintenance	29.10	
Marketing board fees (\$6.50/tonne)		6.50	
Production insurance		19.00	
Risk Management Program		1.30	
Custom work	fertilizer application, mixing and delivery	12.10	
	5 pesticide applications	55.55	
Trucking (\$9.10/tonne)		9.10	
Drying		–	
Land rent		–	
Operator labour (self or hired)		19.35	
Interest on operating		8.50	
Total Operating Expenses		500.55	
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		564.15	
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	116.40	91.80	
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	44.40	47.25	
	repairs and maintenance	35.25	44.50	
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		25.35	21.50	
Risk Management Program		4.75	2.35	
Custom work		–	–	
Added expense for handling organic crops		–	–	
Trucking (\$9.10/tonne corn, \$9.10/tonne soybeans)		28.45	9.30	
Drying (\$21.90/tonne corn)		66.65	–	
Storage		9.00	9.00	
Land rent		–	–	
Operator labour (self or hired)		21.15	22.55	
Labour — hand weed		–	–	
Interest on operating		9.40	5.70	
Total Operating Expenses		555.75	335.50	
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		630.25	434.80	
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	Spelt	Your Farm Budget	
		Sample Costs/Acre	Sample Costs/Acre		
Seed	wheat: 1.5–1.7 million seeds/acre, certified, organic; spelt: 180 kg/ha certified, organic	99.70	116.35		
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 machine expenses	fuel (30 L) and lubricants	36.15	36.15		
	repairs and maintenance	27.70	27.70		
Production insurance		41.45	30.25		
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 (\$9.10/tonne)		13.65	9.95		
Storage		9.00	9.00		
Land rent		–	–		
Operator labour (self or hired)		16.70	16.70		
Labour — hand weed					
Interest on operating		12.65	12.60		
Total Operating Expenses — Grain		454.40	452.45		
Expenses for Straw (costs based on projected yield of 2.41 tonnes/acre)					
Tractor and machine expenses	fuel (6 L) and lubricants	6.70	6.70		
	repairs and maintenance	7.30	7.30		
Twine		10.60	10.60		
Other		14.45	14.45		
Total Operating Expenses — Straw		39.05	39.05		
Total Operating Expenses		493.45	491.50		
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		517.25	569.10	515.30	567.15
Break-even price on your farm (total expenses/expected yield):					

* Organic budget estimates do not include transition period costs.

** Manure, compost and cover crop 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	107.75	108.50		
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	36.15	36.15		
	repairs and maintenance	29.30	29.30		
Production insurance		10.05	10.05		
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 (\$9.10/tonne)		11.10	9.15		
Storage		9.00	9.00		
Land rent		–	–		
Operator labour (self or hired)		16.70	16.70		
Labour — hand weed		–	–		
Interest on operating		9.30	9.20		
Total Operating Expenses — Grain		334.25	331.15		
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	6.70	6.70		
	repairs and maintenance	7.30	7.30		
Twine		8.30	9.70		
Other		14.45	14.45		
Total Operating Expenses — Straw		36.75	38.15		
Total Operating Expenses		371.00	369.30		
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		393.00	442.55	389.90	440.85
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	= 1¾ 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	

Published by the Ontario Ministry of Agriculture,
Food and Rural Affairs
© Queen's Printer for Ontario, 2022
ISSN 0838-5657X
01-22
Également disponible en français (0060F)

Agricultural Information Contact Centre:

1-877-424-1300

1-855-696-2811 (TTY)

E-mail: ag.info.omafra@ontario.ca

ontario.ca/omafra



ontario.ca/omafra