



2008 POPCORN PRODUCTION BUDGET

Large-Scale, Conservation Tillage Practices

Authors: Brian Freytag, Ohio State University Extension Intern *
 Barry Ward: Leader, Production Business Management*
 Andrew Kleinschmidt: Extension Educator **

ITEM	EXPLANATION	Your Prod Numbers	PRICE PER UNIT	Updated			5/19/2008		
				YIELD (lb/A)			YOUR BUDGET		
				2600	3400	4200	4300		
RECEIPTS ¹									
Popcorn			\$22.09 / cwt	\$574.44	\$751.20	\$927.95	\$950.04		
VARIABLE COSTS									
	Seeding Rates								
Seed ²	24000	26000	30000	28000	\$10.00 /10000	24.00	26.00	30.00	28.00
Per Pound/Acre					/lb				0.00
Fertilizer ³	Application Rates								
N (lb.)	128	146	165	165	\$0.49 /lb.	62.44	71.22	80.49	80.49
P2O5(lb.)	43.29	55.5	66.97	66.97	\$0.87 /lb.	37.46	48.03	57.95	57.95
K2O(lb.)	31.59	40.5	48.87	48.87	\$0.48 /lb.	15.29	19.61	23.66	23.66
Lime(ton)		0.25		0.25	\$23.50 /ton	5.88	5.88	5.88	5.88
Chemicals ⁴									
Herbicide						26.86	26.86	26.86	26.86
Insecticide									
- At Planting			8.7 lb/A		\$2.23 /lb	19.40	19.40	19.40	19.40
- During Silking			9.6 fl. oz/A		\$87.31 /gal	6.55	6.55	6.55	6.55
Fungicide									
Trucking - Fuel Only ⁵					0.005 /cwt	13.00	17.00	21.00	21.50
Fuel, Oil, Grease ⁶						18.87	18.87	18.87	18.87
Repairs ⁷						15.23	15.23	15.23	15.23
Crop Insurance ⁸						15.00	15.50	17.00	19.00
Hired Labor ⁹						0.00	0.00	0.00	0.00
Miscellaneous ¹⁰						8.00	9.00	10.00	10.00
Int. on Oper. Cap. ¹¹		7 mo.			9.0%	14.07	15.71	17.48	16.37
TOTAL VARIABLE COSTS	-Per Acre					282.06	314.85	350.37	349.77
FIXED COSTS									
Labor Charge ¹²		3.6 hours			13.50 /hr.	48.60	48.60	48.60	48.60
Mach. And Equip. Charge ¹³						65.07	65.07	65.07	65.07
Land Charge ¹⁴		Rent				94.82	123.50	156.88	156.88
Management Charge ¹⁵		5% of gross revenue				28.72	37.56	46.40	47.50
TOTAL FIXED COSTS						237.21	274.73	316.95	318.05
TOTAL COSTS	-Per Acre					519.27	589.59	667.32	667.82
RETURN ABOVE VARIABLE COSTS						292.39	436.34	577.58	600.27
RETURN ABOVE TOTAL COSTS						55.17	161.61	260.63	282.22
RETURN TO LABOR AND MANAGEMENT ¹⁶						132.50	247.77	355.62	378.32
RETURN TO LAND						149.99	285.11	417.51	439.10

Values highlighted in gold may be changed to assist in computing "Your Budget" Column using macros embeded within the spreadsheet.

Values highlighted in light blue are cells embedded with macros and will be calculated for the user based on data entered.

These cells may be input manually, but macros will be overwritten!

Values highlighted in gray are stand alone cells that require direct input from the user.

* Brian Freytag and Barry Ward are part of the Department of Agricultural, Environmental and Development Economics at OSU

** Andrew Kleinschmidt is an extension educator at the Van Wert County Extension Office

¹ Price and yield for shelled popcorn grown under contract. Some contracts price corn based on a formula related to field corn price (e.g. corn futures x 3.6 + \$0.35 =\$/cwt.) - Dec. futures used in this budget

² Seeding rates based on 30-36" rows with 8-12" in-row (2008 Ohio Vegetable Production Guide pg 247)
 Specific rates provided by Andrew Kleinschmidt (OSU Ext. Educator)
 Seed prices estimated from 2008 Rupp & Seiger Seed Company cataloges

- ³ Assumes only maintenance application of fertilizer needed (also assumes same rate as field corn) and soil test values of 25 ppm P/A and 150 ppm K/A.
Fertilizer prices vary over time and by area. Check with local sources for current prices.
Assumes NH₃ (82-0-0): 800 /ton MAP(11-52-0): 900 /ton Potash(0-0-60): 581 /ton
- ⁴ Assumes same chemicals/rates as field corn (See 2008 NH₃ Corn Budget)
- ⁵ Trucking set at .005/cwt based on "12 miles or less" field to market.
- ⁶ See table below for specific calculations. Lubrications costs are assumed to be 10% of fuel costs
- ⁷ See table below for specific calculations.
- ⁸ Crop Insurance cost is based on CRC Insurance at 70% coverage level and 100% Price Protection Level. 2008 Cost Estimates.
- ⁹ Part or all of labor may be a variable cost if paid labor varies with acres farmed. It's a fixed cost if labor costs do not change with acres farmed.
- ¹⁰ Includes supplies, utilities, soil tests, small tools, software/hardware, transport of supplies and equipment, etc...
- ¹¹ Interest on all variable costs, except trucking, for 7 months at 9.0% interest rate.
- ¹² Labor rate includes cash wages plus benefits.
- ¹³ Reflects 1500 acres, conservation tillage practices. See table below for specific calculations
- ¹⁴ Average based on 2007-2008 data.
<http://aede.osu.edu/resources/docs/pdf/UDSIO6SG-9315-IQAW-X7QLG33KLMNAZZ6.pdf>
Land charges vary throughout the state, check your local rates.
- ¹⁵ Management Charge is calculated as 5% of Total Receipts.
- ¹⁶ Return to labor and management is the revenue less total expenses except operator labor and management.
It is a measure of the returns to the operator's labor and management.

Machinery Inventory								
	Number times used	Machinery Cost	Acres per Year	Cost per Acre	Acres/ Hr	Fuel* (gal/A)	Hours/ Year	Repairs (\$/A)
15 ft. Chisel Plow	1	\$15,800	750	\$2.86	8.5	0.60	88.24	0.57
23 ft. Field Cultivator	1	\$29,400	750	\$5.33	16.6	0.32	45.21	0.57
50 ft. Boom Sprayer	2	\$18,900	1,500	\$1.71	25.6	0.20	117.14	0.72
8 Row Planter	1	\$28,400	750	\$4.79	9.3	0.34	80.39	0.99
Combine 275 HP	1	\$207,000	1,500	\$19.38	-----	-----	147.35	6.78
Corn Head 20'	1	\$45,200	750	\$8.46	5.1	2.41	147.35	1.03
Anhydrous Applic. 21'	1	\$9,920	750	\$1.80	11.2	0.66	66.96	0.21
Fertilizer Spreader	1	\$11,550	1,500	\$1.05	25.6	0.12	58.59	0.24
Semi Tractor/Trailer**	1	\$31,500	1,500	\$2.81	-----	-----	-----	1.75
200 HP Tractor	5	\$142,000	1,500	\$12.69	-----	-----	339.39	2.14
75 HP Tractor	2	\$32,000	1,500	\$2.76	-----	-----	117.14	0.18
Pickup Truck (1/2)**	1	\$16,000	1,500	\$1.43	-----	0.21	-----	0.05
Machinery and Equipment Charge per Acre				\$65.07	Fuel F&L	17.16	18.87	Repairs 15.23

Price of Diesel Fuel = \$3.50

Machinery cost estimates, fuel estimates and cost calculations based on information from the "Farm Machinery Cost Estimates

March 2008". See the reference online at:

<http://www.extension.umn.edu/distribution/businessmanagement/DF6696.pdf>

Machinery and Equipment charge =

Cost per Acre = Machinery Cost (New Cost) Assumes 8 Year Useful Life using Straight Line Depreciation,

6.0% Interest on Average Value, 0.5% Insurance Cost on Average Value and 1.0% Housing Cost on Average Value.

Salvage Values are based on ASAE formulas.

Machines are all assumed to be new and in the first year of use (Except for Semi Tractor Trailer and Pickup Truck).

*Fuel calculations are based on the implement plus tractor.

**Semi Tractor Trailer and Pickup Truck are assumed to be used equipment.

***Fuel for Semi is included in Budget as Trucking - Fuel Only