

OHIO STATE UNIVERSITY EXTENSION

2017 Maple Syrup Business Planning Guide Vacuum Tubing Systems



Author: Les Ober, Program Coordinator Agriculture & Natural Resources
The Ohio State University Extension, Geauga County

400 gallons syrup @ .400 gals per tap yield (1000 taps vacuum tubing system)

Receipts 1/2 retail \$30.00 1/2 bulk (\$2.60/lbs) \$28.60
\$10,000 retail \$5,720 bulk

\$15,720

<u>Expense</u>	<u>Cost/Unit</u>	<u>Per Gal./Syrup</u>		<u>Per/Season</u>		<u>Your Cost</u>
		<u>oil</u>	<u>wood</u>	<u>oil</u>	<u>wood</u>	
Variable Cost						
¹ Evaporator Fuel; Wood	\$2.00/gal fuel oil \$200/cord wood	\$7.82	\$9.50	\$2,880.00	\$3,800.00	
Fuel (diesel/gasoline)	\$2.00 per gallon	\$0.50	\$0.50	\$200.00	\$200.00	
² Utilities		\$1.50	\$1.50	\$600.00	\$600.00	
³ Canning Supplies		\$4.00	\$4.00	\$1,600.00	\$1,600.00	
Repairs		\$1.25	\$1.25	\$500.00	\$500.00	
Labor* (80 hrs. operate tubing system)	\$11.00/hr	\$2.20	\$2.20	\$880.00	\$880.00	
Marketing		\$0.37	\$0.37	\$148.00	\$148.00	
⁴ Interest		\$1.65	\$1.65	\$660.00	\$660.00	
Miscellaneous		\$0.25	\$0.25	\$100.00	\$100.00	
Total Variable Cost		\$19.54	\$21.22	\$7,568.00	\$8,488.00	
Fixed Costs						
⁵ Equipment Expense		\$9.51	\$9.51	\$3,565.00	\$3,565.00	
⁶ Operator Labor (Sugarhouse Mgt.)	\$15.00/hr	\$6.00	\$6.00	\$2,400.00	\$2,400.00	
Taxes						
⁷ Insurance (product liability)		\$0.50	\$0.50	\$200.00	\$200.00	
Land or tap rental						
Total Fixed Cost		\$16.01	\$16.01	\$6,165.00	\$6,165.00	
Total Cost		\$35.55	\$37.23	\$13,733.00	\$14,653.00	

				<u>oil</u>	<u>wood</u>	<u>Your Cost</u>
⁸Return above Total Cost				\$1,987.00	\$1,067.00	
⁹Return above Variable Costs				\$8,152.00	\$7,232.00	
¹⁰Return to Labor & Management				\$4,387.00	\$3,467.00	

*Neil K. Huyler; cost of Maple Sap Production for various size operations, USDA Res. Pap. NE-712

¹Two Fuel sources: Wood, 1 cord, will process approx. 21 Gallons of Syrup. The cost to produce 1 gallon of syrup with wood is \$9.50 per gallon when a full cord of wood sells for \$200.00 per cord (Ohio cord selling in Fall 2016)

Fuel oil costing \$2.00 / gal. in a 3X10 Evap. rated at 100 gallons per hour (2% sap) will burn 9 gallon per hour (drawing off 2.3 gallons of syrup per hour)
The cost of producing 1 gallon of syrup with oil is \$8.00 per gallon based on 2016 fuel oil prices. Oil and wood fuel cost are almost the same in the spring of 2016

³Canning Supplies: 50% of the crop canned in gallon containers.
Using approximat current case lot prices for plastic containers.

⁴\$0.15/# based on Cornell University Maple Enterprise Business Summary

⁵Equipment	Total Cost	Life Expectancy	Seasonal	Your Cost
Tubing System (\$10.00 per tap)	\$10,000.00	10 yrs	\$1,000.00	
Vacuum System (Pump Extractor)	\$6,000.00	10 yrs	\$600.00	
Storage Tanks	\$2,800.00	20 yrs	\$140.00	
Evaporator 3X10 oil fired	\$20,000.00	20 yrs	\$1,000.00	
Evaporator 3X10 wood fired with forced air draft				
Building (20 yr.)	\$15,000.00	20 yrs	\$750.00	
Filter Press plus canning tank	\$3,500.00	20 yrs	\$175.00	
Miscellaneous	\$1,400.00	10 yrs	\$140.00	
All equipment depreciates at 10 years except tubing it is 5 years				
Total	\$58,700.00		\$3,805.00	
⁵ Operator Labor no RO (Sugarhouse Mgt. \$15.00/hour)*				Your Cost
Processing	123 hrs*		\$1,800.00	
Setup & Cleanup	20 hrs**		\$300.00	
Canning	20 hrs**		\$300.00	
Total Labor	163 hrs		\$2,400.00	

* Based on production from a 3x10 Evaporator @ 100 gallons per hour

** Based on the results of an independent poll of local maple producers.

⁷Product liability insurance, on maple products sold, is a separate policy from the standard farm-owners policy. If the maple operation is run as a separate business (LLC, Corp, Partnership) a separate policy on the maple enterprise (including product liability) is recommended along with the standard farm-owners policy.

⁸Receipts minus Total Cost

⁹Receipts minus Variable Cost

¹⁰Return 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.

Resources:

The Ohio State University Department of Agricultural, Environmental, and Development Economics

<http://aede.osu.edu/Programs/FarmManagement/Budgets/maple/index.htm>

Available in Excel Spreadsheet Format

Les Ober, Program Coordinator, Agriculture & Natural Resources

The Ohio State University Extension, Geauga County,
15269 Claridon Troy Road, P.O. Box 387, Burton, OH 44021
440-834-4656
ober.10@osu.edu

North American Maple Syrup 2nd edition OSU Extension/NAMSC Chapter 11 Economics of Maple Syrup Production, Mr. Dave Chapeskie Ontario Ministry of Agriculture & Dr. Melvin R. Koelling Prof. Emert. Michigan State University

Maple Syrup Costs, What Does it Really Cost to Produce That gallon of Maple Syrup, Glenn Rogers Regional Farm Business Management Specialist, University of Vermont



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