

## MAPLE START-UP INVESTMENT AND FINANCIAL BENCHMARKS

Thanks for joining us today.  
The presentation will begin shortly.

Everyone will be muted for the first portion of the  
presentation and you will be able to unmute yourself for  
the question/answer period.

You can type comments or questions into the CHAT  
feature at any time.



**Funding Provided by:**  
**USDA Agricultural Marketing Service:**  
**Acer Development Grant**

# MAPLE START-UP INVESTMENT AND FINANCIAL BENCHMARKS

JULY - 2021

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# MAPLE EDUCATION RESOURCES

[www.maplemanager.org](http://www.maplemanager.org)



Business Plan



Ask the Team



Legal Resources and Templates



Forestry

## Sugarbush Lease 2020: An Annotated Guide

Annette Higby, Attorney at Law  
Mark Cannella, UVM Extension Associate Professor  
Mark Isselhardt, UVM Extension Maple Specialist



FBF5031-1/20

Acer Series: Maple Forest Business Development

Visit [www.maplemanager.org](http://www.maplemanager.org) for maple development resources

### About This Guide

This educational resource is designed for maple syrup producers, maple sap producers and forest land owners to consider, discuss and formalize lease agreements. This resource is not intended to replace the guidance of a legal professional. The situation for each person and party is different and professional legal assistance is recommended to ensure your business agreements are accurate, appropriate and complete.



Visit the [Upcoming Events](#) page to register for upcoming webinars

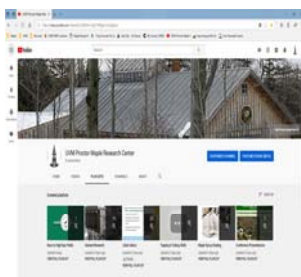
Date	Time	Topic
Wednesday, July 21 <sup>st</sup>	7 pm EST	Total Yields from Red Maple
Wednesday, July 28 <sup>th</sup>	7 pm EST	Maple Start-Up Profiles and Financial Benchmarks
Wednesday, August 11 <sup>th</sup>	7 pm EST	Best Practices for Birch Syrup Flavor
Wednesday, August 25 <sup>th</sup>	7 pm EST	Sugarbush Inventory Methods
Wednesday, September 15 <sup>th</sup>	7 pm EST	Sap-Only Enterprises
Wednesday, September 29 <sup>th</sup>	7 pm EST	Binding Contracts and Legal Agreements
Wednesday, October 13 <sup>th</sup>	7 pm EST	Maple Forests and Carbon
Wednesday, October 27 <sup>th</sup>	7 pm EST	Northeast Forest Land Taxes and Programs



[www.mapleresearch.org](http://www.mapleresearch.org)

Recent maple resources

Papers (Maple Syrup Digest, Maple News, etc)



**UVM Proctor Maple  
YouTube Channel**

Videos on production techniques, grading, research, etc.



**UVM Extension Maple  
Program**

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## NORTHEAST MAPLE BENCHMARK

- Financial Analysis in NY, VT, NH, ME, MA
- Looking for more participants
  - Syrup: ~15,000 tap and higher
  - With Retail: \$100,000 sales and higher
- Sap-Only: looking for case studies



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## FINANCIAL BENCHMARKS

- A way to measure and identify the business situation
- A way to monitor business performance over time.
- Information to support start-ups and capital access.



## COST OF PRODUCTION- 2019 BENCHMARK RESULTS

- ❑ Marketing strategies are a significant driver of costs
- ❑ Large Bulk Producers demonstrate lower costs: ~\$1.80 per pound - \$2.20 per pound
- ❑ Mixed Bulk and Wholesale/Resale demonstrate higher costs: ~\$3.38 per pound or ~\$40 per gallon
- ❑ Profitability is not always directly linked to low production costs or scale of the operation
- ❑ Managers must assess the interaction of costs vs. revenue for their specific business



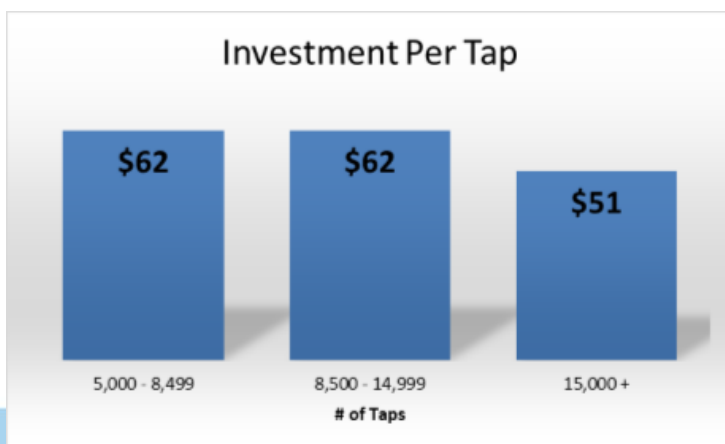


## WHOLE BUSINESS INTERMEDIATE ASSETS

(No real estate) - 2019 BENCHMARK RESULTS



Investment Per Tap



## START-UP INVESTMENT RESEARCH

Special Thanks to Rob Guay (Viewpoint Ag Valuation & Consulting)

- ❑ Average costs from equipment manufacturers
- ❑ Two Business Activities
  - Sap Collection
  - Sap-to- Syrup Processing
- ❑ Several Scales and Growth Stages



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## START-UP INVESTMENT: THE PROFILES

### Sap Only

*Assumptions:*

- Sap Picked up at the tank by sap buyer (see additional truck cost estimate).
- Retail costs minus typical 10% dealer discount
- Includes 40 ft. shipping container with insulated pump room
- Includes limited site work, 200 Amp service hook-up



## START-UP INVESTMENT: SAP ONLY PROFILES

Investments	
Tubing System and Set-up	Extractors
Monitoring System	Tanks
Vacuum Pump	Shipping Container
Power/Driveway-Site Work	

Scale - Taps	
3,000 Taps	10,000 Taps
5,000 Taps	15,000 Taps
7,000 Taps	

## SAP ONLY: 3,000 TAPS

Equipment	3,000 Taps
Vacuum Pump	\$ 4,698
Extractor	\$ 3,239
Tanks	\$ 4,534
Tubing	\$ 45,000
Monitoring System	\$ 5,578
Shipping Container	\$ 5,000
Power/Driveway	\$ 5,000
<b>Total</b>	<b><u>\$73,142</u></b>
<b>Per Tap</b>	<b>\$24.38</b>

## SAP ONLY

	3,000 Taps	5,000 Taps	7,000 Taps
<b>Total</b>	<b><u>\$73,000</u></b>	<b><u>\$110,000</u></b>	<b><u>\$149,000</u></b>
<b>Per Tap</b>	<b>\$24.00</b>	<b>\$22.00</b>	<b>\$21.00</b>

	10,000 Taps	15,000 Taps
<b>Total</b>	<b><u>\$205,000</u></b>	<b><u>\$306,000</u></b>
<b>Per Tap</b>	<b>\$21.50</b>	<b>\$20.50</b>

Real Estate will be added later  
Truck Hauling: add \$3-\$8 per tap

## SAP AND PROCESSING



Investments	
Sap Collection Item List (seen before)	Permeate Tank
Sugarhouse	Evaporator
Reverse Osmosis	Filter Press
Concentrate Tank	Miscellaneous Tools
Barrels	

## SAP AND PROCESSING

Scale (taps) and Locations
5,000 Taps- Direct to Sugarhouse
10,000 Taps - Direct to Sugarhouse
10,000 Taps - 7k taps to SH, 3k taps hauled
20,000 Taps – 15k taps to SH, 5k taps hauled



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## Sap and Processing

### *Assumptions:*

- 5,000 Tap Part-Time: 4-5 hours per day RO and Evap. run time
- 10,000 Tap Full-Time: Up to 6 hours RO/Evap run time
- 20,000 Tap Full-Time (with help): Up to 7-8 hours run time
  
- Sugarhouse: \$50-\$55 per square foot
- No Shipping Container for “Direct” Profiles



## SAP AND PROCESSING

Equipment	5,000 Taps, Direct to Sugarhouse
Sap Collection (shown earlier)	\$99,969
Sugarhouse	\$42,240
Reverse Osmosis	\$21,500
Concentrate Tank	\$1,198
Permeate Tank	\$1,901
Evaporator	\$ 27,200
Filter Press	\$3,156
Misc. Tools	\$1,000
Barrels	\$9,600
<b>Processing Subtotal</b>	<b>\$107,794</b>
<b>Processing Subtotal Per Tap</b>	<b>\$21.56</b>
<b>TOTAL COST PROCESSING</b>	<b><u>\$207,763</u></b>
<b>TOTAL COST PER TAP</b>	<b>\$41.55</b>

## SAP AND PROCESSING

	5,000 Direct	10,000 Direct
<b>Sap Subtotal</b>	<b>\$99,969</b>	<b>\$196,596</b>
<b>Processing Subtotal</b>	<b>\$107,794</b>	<b>\$153,730</b>
<b>TOTAL COSTS</b>	<b><u>\$207,763</u></b>	<b><u>\$353,326</u></b>
<b>TOTAL PER TAP</b>	<b>\$41.55</b>	<b>\$35.33</b>

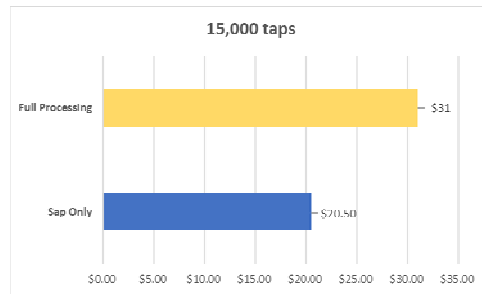
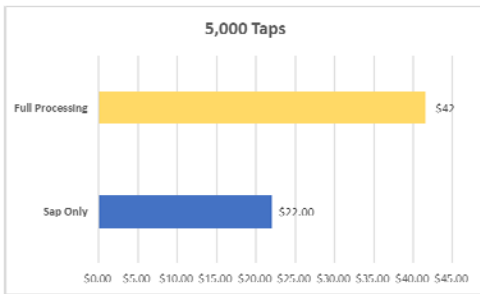
Real Estate will be added later

## SAP AND PROCESSING

	10,000 Tap (7k direct, 3k haul)	20,000 Tap (15k direct, 5 k haul)
<b>Sap Subtotal</b>	<b>\$212,396</b>	<b>\$406,212</b>
<b>Processing Subtotal</b>	<b>\$156,730</b>	<b>\$224,702</b>
<b>TOTAL COSTS</b>	<b><u>\$369,126</u></b>	<b><u>\$630,914</u></b>
<b>TOTAL PER TAP</b>	<b>\$36.91</b>	<b>\$31.55</b>

Real Estate will be added later  
Truck Hauling: add \$3-\$8 per tap

## INVESTMENT COMPARISON



## QUICK REVIEW

**We have covered:**

- ✓ Equipment and tubing set-up
- ✓ Basic land improvements
- ✓ Sugarhouse construction
- ✓ Processing equipment to “bulk” status

**Additional Costs:**

- ✓ Truck Hauling: add \$3-\$8 per tap
- ✓ .... Real estate is next!



## ADDING REAL ESTATE – SAP ONLY PROFILE

Assumption: 55 taps per acre

- \$1,000 per acre = \$18 per tap
- \$2,000 per acre = \$36 per tap
- \$3,000 per acre = \$55 per tap
  
- Don't forget Year 1-3 Operating Capital

	\$1,000 per A	\$2,000 per A	\$3,000 per A
<b>3,000 Taps</b>	<b>\$42</b> <b><u>\$126,000</u></b>	<b>\$60</b> <b><u>\$180,000</u></b>	<b>\$79</b> <b><u>\$237,000</u></b>
<b>5,000 Taps</b>	<b>\$40</b> <b><u>\$200,000</u></b>	<b>\$58</b> <b><u>\$290,000</u></b>	<b>\$77</b> <b><u>\$389,000</u></b>
<b>7,000 Taps</b>	<b>\$39</b> <b><u>\$273,000</u></b>	<b>\$57</b> <b><u>\$399,000</u></b>	<b>\$76</b> <b><u>\$532,000</u></b>

## ADDING REAL ESTATE – SAP ONLY PROFILE

	\$1,000 per A	\$2,000 per A	\$3,000 per A
<b>10,000 Taps</b>	<b>\$40</b> <b><u>\$395,000</u></b>	<b>\$58</b> <b><u>\$575,000</u></b>	<b>\$77</b> <b><u>\$765,000</u></b>
<b>15,000 Taps</b>	<b>\$39</b> <b><u>\$577,500</u></b>	<b>\$57</b> <b><u>\$848,000</u></b>	<b>\$76</b> <b><u>\$1,100,000</u></b>

\* Don't forget Year 1-3 Operating Capital



## ADDING REAL ESTATE – PROCESSING PROFILES

	\$1,000 per A	\$3,000 per A
5,000 Taps Direct	\$60 <u>\$298,000</u>	\$97 <u>\$483,000</u>
10,000 Taps Direct	\$53 <u>\$533,000</u>	\$90 <u>\$903,000</u>

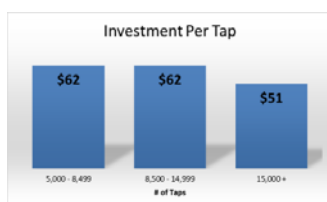
\* Don't forget Year 1-3 Operating Capital

## ADDING REAL ESTATE – PROCESSING PROFILES

	\$1,000 per A	\$3,000 per A
10,000 Taps Mixed	\$55 <u>\$549,100</u>	\$92 <u>\$919,000</u>
20,000 Taps Mixed	\$50 <u>\$991,000</u>	\$87 <u>\$1,700,000</u>

\* Don't forget Year 1-3 Operating Capital

## 2019 BENCHMARK RESULTS



### Why are actual benchmarks higher?

- ✓ \$15-\$20 per tap higher
- ✓ Off-Road and Utility Vehicles
- ✓ Tools and other equipment
- ✓ Office Supplies
- ✓ Canning and Packing

## PRODUCTIVITY PER TAP – BENCHMARK PARTICIPANTS

	<b>Average Investment Value</b>
<b>Above Average Yield Producers</b>	\$ 61 Per Tap
<b>Below Average Yield Producers</b>	\$ 54 Per Tap

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## FINANCIAL BENCHMARKS – INDUSTRY ENHANCEMENT

- Planning Your Growth Step
- Access to Capital
- Performance Measures and Monitoring



