**Maine Maple Syrup Production Costs**

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**ABSTRACT**

Average maple syrup production in Maine has recently surpassed New York state and is second of all U.S. states to Vermont. Maple syrup producers and industry supporters wanted detailed budgets for producing maple syrup in Maine. In June and November 2006, 295 Maine producers were surveyed for their production costs. Total survey respondents were 26 out of 295 for a response rate of about 9%. Using data collected from both surveys, representative maple syrup enterprise budgets were developed for small 300 tap, medium 3000 tap, and large 30,000 tap operations. All budgets allow any mix of tubing and bucket collection and track both operating and ownership costs. Representative budgets can be customized to a particular producer’s operation and budgets allow recording of syrup production by container type. Net farm income or NFI for representative small, medium, and large maple syrup operations using tubing collection are -$5,529, $5,380, and $47,283 respectively. Since all sizes assume use of only family labor, this labor cost is captured in NFI. For small and medium-sized operations, bucket collection has lower equipment costs compared to tubing. However if family labor is included as a cost, tubing is more profitable than buckets since labor is more.

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### Data & Methods

**Maple Syrup Producers**

- New England Agricultural Statistics
- Average 2003-2005 maple syrup prices
- Assume yield 1 quart of syrup per tap
- Input prices and quantities from survey data and equipment catalogs
- Depreciation calculations use capital recovery method

**Budget Example**

- **Size**
  - Small: 300 taps
  - Medium: 3000 taps
  - Large: 30,000 taps
- **Line Item**
  - Revenue
  - Operating Costs
  - Ownership Costs
- **Total**
  - Per Tap
  - Per Gallon
- **S**
  - Revenue: $3,718
  - Operating Costs: $2,843
  - Ownership Costs: $6,404
  - Net Farm Income: -$5,529

**Tubing Profitability**

**Size**

- Small: 300 taps
- Medium: 3000 taps
- Large: 30,000 taps

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<tr>
<th>Line Item</th>
<th>Total</th>
<th>Per Tap</th>
<th>Per Gallon</th>
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<tr>
<td>S</td>
<td>Revenue</td>
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**Current Findings & Conclusions**

- Tubing/bucket profitability results assume family labor cost is not an operating cost so family labor is captured in net farm income
- For small and medium-sized operations, bucket collection has lower equipment costs compared to tubing assuming family labor not specified as an operating cost
- If family labor is included as a cost at $12.36 per hour, tubing collection for small and medium-sized operations are $525 and $14,653 more profitable since less labor is used compared to buckets
- Large operations more profitable using tubing than buckets due to both lower equipment costs and lower labor costs

**Future Work & Use**

- Determine cost effectiveness of artificial vacuum, reverse osmosis, pre-heating, & air injection equipment plus value-added maple products like candy, cream, & sugar
- Budgets allow recording of maple syrup production by the container and/or drum
- Budgets allow any mix of tubing/buckets
- Extension, industry groups, and producers can customize representative budgets to a particular producer’s operation

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**Note**: *Representative Budget Sizes: 1) Small - 300 taps 2) Medium - 3000 taps & 3) Large - 30,000 taps*