Sap Selling Potential Within the Maple Sector

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Background

The hauling of raw maple sap to a centralized processing facility is not a new phenomenon. A historical example of the centralized maple processing facility was seen in the 1940's when the innovative Wisconsin entrepreneur Adin Reynolds began buying sap from numerous farmers to expand his maple enterprise. The specialization of being a sap producer-seller and the ability to expand maple syrup processing as a sap buyer are still relevant business strategies across the maple region today.

University of Vermont Extension surveyed maple producers in the Northeast United States during the 2022/2023 winter months to explore the prevalence and possibility of sap selling and buying in the maple sector. Surveys were completed by 128 producers across several states. The majority of maple producers in this survey were producing their own sap and processing it into syrup. Sixty-three percent of participants were not participating in any sap buying or selling. This resource bulletin focuses on the smaller group of business owners who are buying or selling sap.

The total survey respondents managed 352,000 maple taps on 9,157 acres of forested land during the 2022 production season. Seventy-one percent (71%) of the total forest acres were owned by the operators and 29% of the utilized acres were leased from other forest owners. The average tap count for all respondents was 4,046 taps. Total syrup production in 2022 from all respondents was 125,500 gallons.

Current Sap Buying and Selling

Sixty-three percent of participants were not participating in any sap buying or selling. Thirty-seven percent (37%) of respondents did participant in either sap selling or sap buying with 21% purchasing sap and 16% selling sap.

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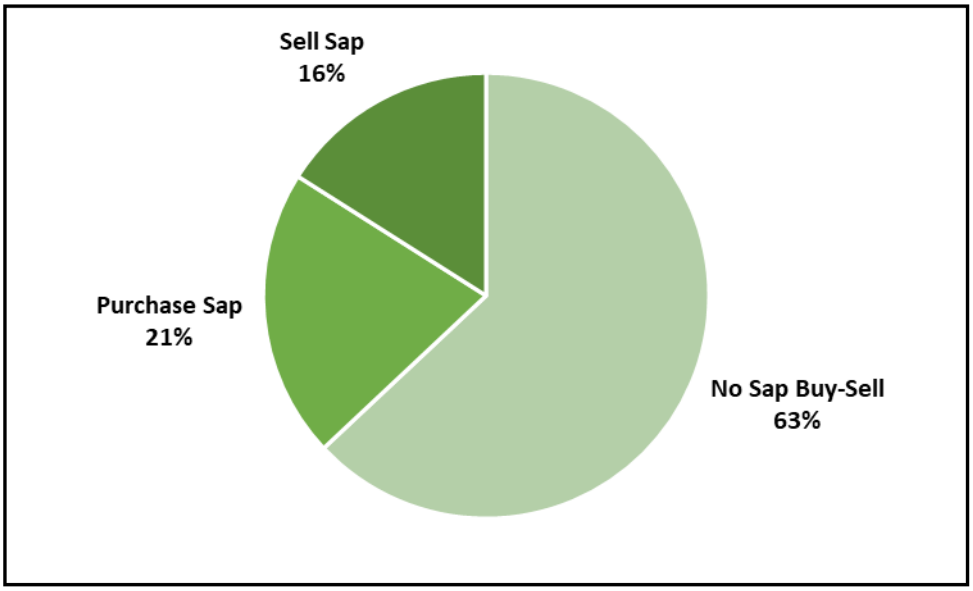

Figure 1: Survey respondents participating in maple sap buying and sales

Sap buying is observed at small and large scales. Sap buyers responding to this survey purchased from as little as 300 gallons of raw sap, up to 87,000 gallons of sap in 2022. The average amount of sap purchase per year was 21,383 gallons and the median was 13,950 gallons. Table 1 below provides an estimate of how many maple taps produced the purchased sap reported from this survey in 2022.

Table 1: Estimating the number of maple taps contributing to 2022 sap purchases

Total Sap Purchases	256,600 gallons
Sugar Content 2022 Sap Purchases	1.84 brix
Finished Syrup Equivalent	5,300 gallons
2022 U.S. Syrup Yield Per Tap	0.35 gallons
Estimated Tap Count for Sap Purchased	15,056 taps
Median Sap Purchase Per Buyer	13,950 gallons
Finished Syrup Equivalent Per Buyer	290 gallons
Estimated Tap Count for Sap Purchased – Per Buyer	823 taps

Sap sales were observed from as low as 5 gallons to a maximum of 550,000 gallons of raw sap sold per year. The average amount of sap sold per year per seller was 41,233 gallons and the average number of taps was 8,628 taps. The median values are lower and indicate the influence of a small number of sap sellers with over 15,000 taps. The median amount of sap sold per year was 7,950 gallons and median tap count for sap-only sellers was 3,000 taps.

Table 2: 2022 Tap counts for different business models

Groups	Average Number of Taps	Median Number of Taps
All Survey Respondents	4,046	865
Sap-only Sellers	10,927	5,000
Sap Buyers	2,241	837

The vast majority of sap selling reported in this survey is coming from operator owned taps. For sap buyers, however, utilization of leased taps is more common. This indicates that there are syrup processing businesses that are utilizing both leased taps and sap purchasing to expand the total volume of syrup produced and sold.

The Impact of Increased Sap Buying and Selling

Survey respondents indicated if they could handle or process more maple sap in their sugarhouses. The majority of producers (63%) indicate they could handle more sap (Figure 2). The majority of respondents (66%) in this subgroup indicated that they do not need to make changes current systems and set-up to accept this additional sap. Forty-six respondents provided an estimate of the volume of additional maple syrup they could produce with little to no additional investment. Similar to other sap buying trends in this survey, respondents operated at a wide range of scales that make the calculated "average syrup expansion" problematic. Nonetheless, the average amount of additional syrup potential per business for this group is 936 gallons. A more conservative estimate is reflected in the median amount of additional syrup potential per business, 300 gallons.

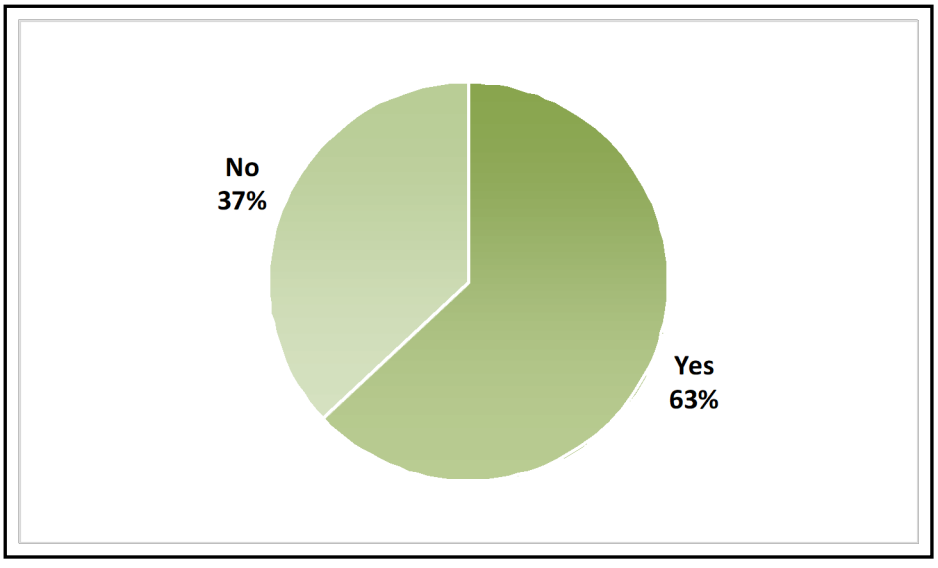

Figure 2: Survey respondents able to accept more maple sap in current sugarhouse

The total amount of maple syrup produced in 2022 for all survey respondents was 125,502 gallons. Respondents estimated that they could produce an additional 43,062 gallons of syrup with little to no additional investments in tapping or processing systems. This results in a potential maple crop expansion of 35% coming from additional sap production investments but no major adjustments to existing syrup processing capacity.

Conclusions

Survey results demonstrate the potential for substantial growth for the maple syrup supply with little investment in processing capacity. While the majority of maple participants produce their own sap and process it to syrup, there is a presence of maple operators who have adopted maple selling and buying practices into viable business models. Innovation in the maple industry continues to make both sap and syrup production more efficient. These trends have led to strong demand for maple sap both for traditional use, as raw ingredient for maple syrup, and for emerging uses in other beverages and novel products syrup. Establishing standalone sap businesses can enable operators to bring forest lands into production faster. Operators can focus time and investment on establishing and managing productive sugarbushes without the additional effort and investment to complete the processing and sales of finished syrup.

There are situations when active syrup producers are unable to purchase more forest to expand taps. Sap purchasing, in addition to sugarbush leases, can support expansion of successful businesses without the requirement of increasing the forest land ownership investment. Successful maple sellers who have the potential to expand their sales but have reached the productive capacity of their owned land can pursue expanded syrup production through business-to-business sap buying practices.

Forest inventories estimate that 5% - 10% of mature maple trees are tapped in leading production states of Vermont, Maine, and New York. Many other maple producing states are only utilizing 5% or less of tappable maple trees. In some regions, however, mature maple stands exist in areas that have limited accessibility or other features that could prevent significant sugarhouse facility development. Sap only business models offer an alternative development opportunity when accessibility challenges limit the full development potential in certain locations.

The success of any maple business will depend on the right mix of management, marketing and mediating the risk of an often-unpredictable seasonal crop. The known challenges of limited land access and high investment costs can pose challenges for existing and prospective maple operators. Business-to-business sap buying and sap selling, however, offers an opportunity for many individuals seeking to overcome these barriers and contribute to the growing maple industry.

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