

# Pouring on the Flavor

MAPLE SYRUP LEGEND, PRODUCTION & FESTIVITIES

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There are no authenticated accounts of how maple syrup production and consumption began, but various legends exist; one popular tale is that Chief Woksis of the Iroquois threw his tomahawk at a maple tree in the cold of winter. The next day, the sun warmed the sap inside the tree, and from the hole sprung forth the tasty syrup. His wife then cooked their meat in the sap, and it was so delicious the natives began to make maple sugar a part of their lives. Another explanation of the Native Americans' discovery is based on the fact that maple trees can create "sapsicles" in the winter. These are icicles with frozen sap in the middle of them that form when a twig breaks and releases sap from the tree. It is believed that Native Americans may have come upon these "sapsicles" and discovered the maple tree's sweet surprise.

Indigenous tribes developed rituals around sugar-making, celebrating the Sugar Moon, the first full moon of spring, with a Maple Dance. The Sugar Moon is named because

March marks the time of year when the sap of sugar maple trees begins to flow and they can be tapped. The Algonquins recognized maple sap as a source of energy and nutrition.

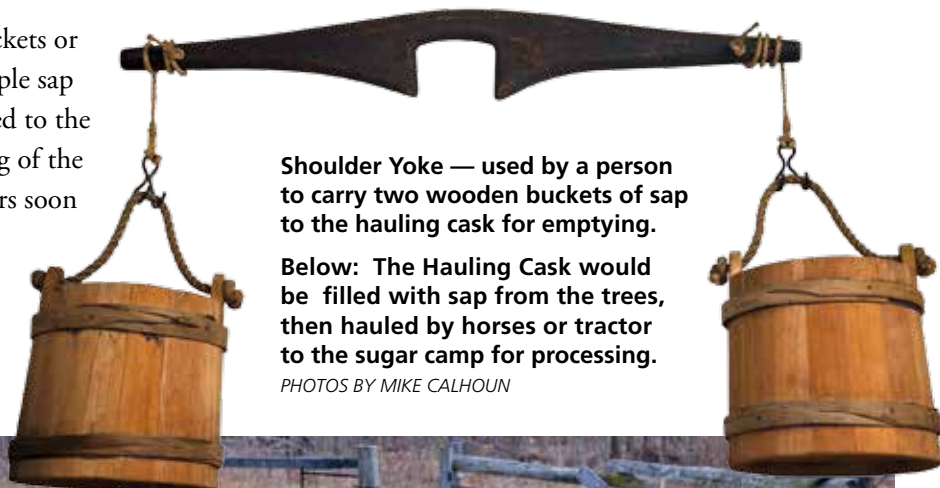
Earliest peoples living in northeastern North America were the first groups known to have produced maple syrup and maple sugar. According to native oral traditions, as well as archaeological evidence, maple tree sap was being processed into syrup long before Europeans arrived in the region. In the early stages of European colonization in northeastern North America, local peoples showed the arriving colonists how to tap the trunks of certain types of maples during the spring thaw to harvest the sap.

At the beginning of the spring thaw, they made V-shaped incisions in tree trunks; then inserted reeds or concave

pieces of bark to run the sap into clay buckets or tightly woven birch-bark baskets. The maple sap was concentrated first by leaving it exposed to the cold temperatures overnight and disposing of the layer of ice that formed on top. The settlers soon discovered that a more efficient way to gather the sap was to bore a hole into the tree and place a spile in the hole to let the sap run out. They began with the collection of sap in wooden buckets and then boiled the sap in a row of iron kettles. As the syrup would thicken, they would spoon the thicker syrup into the next kettle and add more sap into the first pot. This ensured a more efficient process, with the last iron kettle always containing nearly finished syrup. The syrup in the last pot would be stirred until it crystalized, then molded into blocks that could be stored for later use.

Settlers of New England used the maple sugar as a food staple, but also made an excess to use as a trade item. Instead of having to depend on foreign plantations in the West Indies for sugar they were able to keep money circulating in the local economy.

About the time of the American Civil War (1861–1865), cane sugar replaced maple sugar as the dominant sweetener in the United States; as a result, producers focused marketing efforts on maple syrup. The first evaporator, used to heat and concentrate sap, was patented in 1858. In 1872, an evaporator was developed that featured two pans and a metal arch or firebox, which greatly decreased boiling time. Around 1900, producers bent the tin that formed the bottom of a pan into a series of flues which increased



**Shoulder Yoke** — used by a person to carry two wooden buckets of sap to the hauling cask for emptying.

**Below:** The Hauling Cask would be filled with sap from the trees, then hauled by horses or tractor to the sugar camp for processing.

*PHOTOS BY MIKE CALHOUN*



**Tapping of maple trees progressed from wooden bucket to metal buckets but still had to be hauled to the sugar camp manually.** *PHOTO BY DALE THOMAS*



the heated surface area of the pan and again decreased boiling time. Some producers also added a finishing pan, a separate batch evaporator, as a final stage in the evaporation process. Syrup producers also began using sleds and tractors to haul vats of sap from the trees being tapped to the evaporator. Various heating methods were used and filtration techniques were perfected to prevent contamination of the syrup.

Improved plastic tubing systems, during the 1970s, allowed the sap to drain from the trees and go directly to the evaporator housing. Vacuum pumps were added to the tubing systems, and preheaters were developed to recycle heat lost in the steam. Producers developed reverse-osmosis machines to take a portion of water out of the sap before boiling, increasing processing efficiency.

The syrup can also be heated longer and further processed to create a variety of other maple products, including maple sugar, maple butter or cream and maple candy or taffy.



**Top:** Plastic tubing, used since the 1970s, has replaced buckets and allows sap to be directly transferred from the trees to the evaporator housing. Miles of plastic tubing needs to be maintained throughout the year due to curious animals such as squirrels and deer.

**Middle:** The Reverse Osmosis Machine removes 80% of the water from the sap before sending it over to the Evaporator for boiling, increasing processing efficiency.

**Bottom:** The Evaporator — sap gets boiled down to its final syrup stage.

*PHOTOS BY MIKE CALHOUN*



The sugar maple tree (*Acer saccharum*) is a deciduous tree that can grow to a height of 60 to 75 feet or more. Native to the northeastern United States, it is the main source of maple products because the sap contains a larger percentage of plant sugars than other maple tree species.

The fruit of the maple trees are technically known as samaras, but you probably are more familiar with them being called helicopters, whirligigs or spinners due to their descent to the ground. Sugar maple samaras are green in the spring, changing to yellowish-green and then to light brown in the fall. The samaras fall from the trees in brisk winds and it is said they can fly as far as 330 feet from the tree.

Sugar maples are usually tapped beginning at 30 to 40 years of age. Each tree can support between one and three taps, depending on its trunk diameter. It takes approximately 40 gallons of maple sap to produce one gallon of maple syrup, and maple trees can continue to be tapped for sap until they are over 100 years old.

Tap seasons usually occur during late winter and spring and last approximately four to eight weeks. Specific weather conditions of the thaw period were, and still are, critical in determining the length of the sugaring season. During the day, starch stored in the tree roots for the winter rises through the trunk as sugary sap, allowing it to be tapped. Sap is not tapped at night because the temperature drop inhibits sap flow. As the weather continues to warm, a maple tree's normal early spring biological process eventually alters the taste of the sap, making it unpalatable, perhaps due to an increase in amino acids.



## REGIONAL MAPLE SYRUP FESTIVITIES

Many areas known for their maple syrup production host festivals and tours during early spring. Demonstrations, farm equipment, food, craft booths and entertainment offer a welcome break to a long winter.

The Somerset County Maple Producers Association annually presents the Maple Weekend Taste & Tour, In and Around Somerset County. The Taste & Tour highlights 20+ participating sugar camps in and around Somerset County, PA. For more information on the March 11 & 12, 2023 event and locations, visit their website at [www.somersetcountymaple.org](http://www.somersetcountymaple.org).

The Pickens Historical & Improvement Society reserves the third full weekend in March each year to open their town for the Pickens, WV, Maple Syrup Festival. Buckwheat and Buttermilk pancakes are both available, along with craft vendors, festival food and small town hospitality. Visit [pickenswv.squarespace.com/maple-syrup-festival](http://pickenswv.squarespace.com/maple-syrup-festival) for more information.

Located in the Laurel Highlands, Meyersdale, Pennsylvania (also known as Maple City, USA), will host the annual Pennsylvania Maple Festival April 22 & 23 and April 26 - 30, 2023. See their website at [www.pamaplefestival.com](http://www.pamaplefestival.com) for more details.

March 2023 Maple Syrup Festival Frederick, MD; maple syrup supplied by S&S Sugar Camp of Corriganville, MD. Visit their website at [www.visitfrederick.org/blog/post/experience-the-tradition-of-making-maple-syrup](http://www.visitfrederick.org/blog/post/experience-the-tradition-of-making-maple-syrup). 301-271-7574.

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