

Conservation Matters

A monthly column focused on conservation education, as the result of collaboration among several area conservation commissions and organizations. If your town's commission or conservation organization would like to contribute articles, please contact Jessica Tabolt Halm jesshalm78@gmail.com

Title: Not Your Grandfather's Sugar House

Written by: Rumney Conservation Commission

It's March! New birds have shown up at the bird feeders, the days are getting longer, the temperatures are getting warmer but best of all, the sap begins to run. Here in New England, we are fortunate to have fresh maple syrup readily available just about everywhere. Our children often know not only real versus fake stuff but also the different grades of syrup. But maple syrup takes hard work, and not just in the spring.

Good syrup starts with healthy maple trees, and that starts with good forest management. A sugarbush, or stand of maple trees, can become overcrowded, lowering the amount of sap produced. A vigorous stand of maple trees can produce better sugar content and sap volume and improve the trees' ability to recover from insects and disease. Maple trees rarely develop the necessary large crowns naturally. To achieve this, maples must be released through thinning and other types of improvement practices throughout their various stages of development. Working with a forester or the NH Cooperative Extension Service, a landowner can get advice on how to have a productive, healthy sugar bush.

The warmer temperatures of spring cause the sugar maple trees to turn the stored starch back into sugar. The cold nights and warm days will build up pressure within the trees, causing the sap to flow from the tapholes. Today's producers use a "health spout" which requires a much smaller tap hole than in years past so a healthy tree can heal up in a year or two.

The next step is to get the sap to the sugar house where the real magic happens. While sap from buckets must be gathered by hand and dumped into a gathering tank which is then transported to the sugarhouse, tubing is sometimes used to connect the trees directly to the sugar house. You can increase the amount of sap you collect per tree by using a vacuum tubing system. During boiling, storage tank pipes feed sap to a long and narrow ridged pan called an evaporator. As it boils, water evaporates and the sap becomes denser and sweeter. The sap is boiled until it reaches the density of maple syrup. About 40 quarts of sap boil down to one quart of pure maple syrup.

Using an efficient evaporator will boil the sap down more quickly and use less fuel. Many modern sugarmakers use a Reverse Osmosis (RO) machine to concentrate the raw sap and newer and much more efficient evaporators also preheat and boil sap to make syrup thus saving a significant amount of time and fuel.

This year, the 24th Annual NH Maple Weekend will be March 23 – 24, 2019. Join the fun at a local participating sugar house! Sugar makers open their doors to the public to demonstrate the centuries-old craft of maple sugaring. Many offer free samples of fresh syrup, maple candies and doughnuts. Some locations offer pancake breakfasts, petting farms or horse-drawn rides. For a list of participating sugar producers, <https://nhmapleproducers.com/maple-month/>

For more information, check out the New Hampshire Cooperative Extension Website <https://extension.unh.edu/resource/maple-sugaring-tips-beginners-and-backyard-maple-sugar-producers>.



Evaporator



Taps and tubing