

# Maple Sugaring

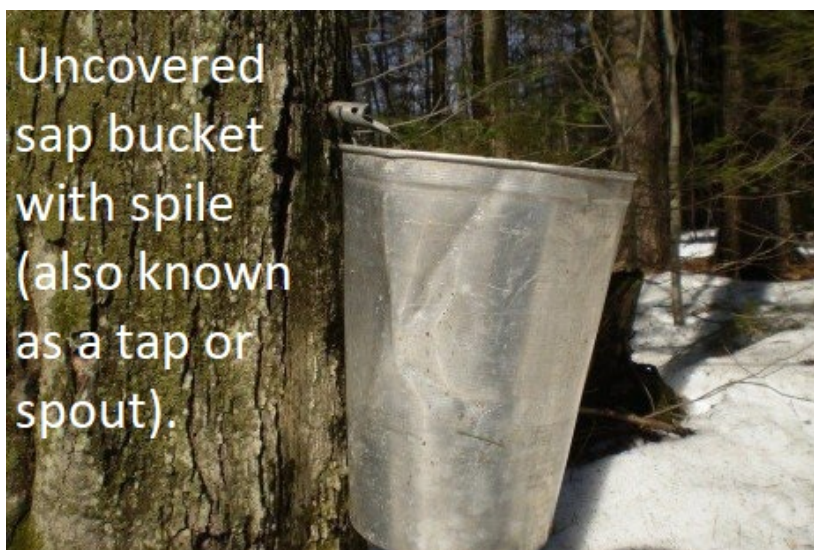
*by Jean M., video by Ed J.*  
Rutgers Master Gardeners of Hunterdon County  
*photos by Jean M. and Penn State Extension*

What was, perhaps, the first natural sweetener produced in the U.S.? Maple syrup. Folklore credits our Native Americans with discovering how to create this sweet treat. (Honey bees were introduced in the 1600s by European settlers in Virginia so maple syrup has been enjoyed here longer than honey.)

The traditional species of maples tapped are red and sugar. Sugar maples have five-lobed leaves while red maple leaves have three lobes. However, during winter, the best indicator of whether a maple is a sugar or red is to look closely at the buds. The buds of sugar maples are brown and pointed, whereas the buds of red maples are rounded and red. (See photo comparing buds of sugar and red maples.)



So how large does a tree have to be to be tapped? Maple trees need at least a 10" trunk diameter (not circumference), about 4.5 feet up from the ground. Sap



runs when nighttime temperatures are in the 20s and daytime highs are in the 40s. And it takes, on average, 43 gallons of sap to make 1 gallon of syrup! Once buds break, the sap develops an "off" flavor and should not be processed. The buds of red maples break sooner than sugar maples, therefore they should be tapped first.





The basic process of converting maple sap to maple syrup increases the sugar content from 2% to 66%-67% by evaporating excess water. (The boiling point of finished syrup is 219 degrees F.) This requires boiling off so much moisture, it is highly recommended to be done outside to prevent damaging interior walls.

Hunterdon County Master Gardener Ed J. used items from around his house to process a small batch of maple syrup. View his [5-minute video](#).

Cornell professor Brian Chabot further discusses maple sugaring in a larger capacity in his "[History and Production of Maple Syrup](#)".

If you are intrigued with the idea of producing your own maple syrup, equipment can be found at many hardware stores and through maple equipment dealers. Some might already be in your home. The actual steps to produce maple syrup are too lengthy to be included here, but if you would like to give it a try the PennState Extension has a page filled with [articles, videos and webinars on collecting and producing maple syrup](#). The University of New Hampshire Extension offers a page of [Maple Sugaring Tips for Beginners and Backyard Maple Sugar Producers](#).

Whether you intend to try to produce your own maple syrup or simply buy some from a store, enjoy the rich sweetness from our native maple trees on your next stack of pancakes, waffles,.... Mmmm!



Enjoying maple syrup, one of the oldest natural sweeteners produced in North America. Mmmm!

