

## Maple Sugaring History

Throughout the northeast, sap from maple trees is collected when the winter sun increases in intensity to raise temperatures above freezing. Typically for Hunterdon County, this time begins around the end of January to mid-February. Maple sap is important to the tree because it carries necessary minerals, nutrients, and sugars that enable the tree to sprout leaves. A tap hole in a given season will yield five to fifteen gallons of sap, which is only a small portion of the tree's total sap production.

Native Americans were tapping maple trees long before European immigrants settled North America. They introduced the settlers to "Indian Sugar" and "Indian Molasses" which we know today as maple syrup.

Can maple sugaring be done at home as a family activity? The answer is a definite yes! This information sheet will provide the basics to help you get started.

## Maple Sugaring Programs

The Hunterdon County Parks Division has offered maple sugaring demonstrations since the mid 1980s. Typically, we now tap the trees at the end of January with public participants, and groups and individuals can sign up to help collect sap in February. We offer our Living History Program in early March for groups, and a public open house that weekend. Call us or visit our website for more information.

## Additional Reading Materials

There are many books and websites that provide detailed information about maple sugaring, including those listed below.

1. Amateur Sugar Maker, Noel Perrin, Hanover, N.H.: University Press, 1972.
2. Backyard Maple Syrup, Ithaca NY Cornell University, Division of Natural Resources.
3. Backyard Syrup Making from Maple Trees, Durham, N.H.: University of New Hampshire, U.S. Dept. of Agriculture, and Extension Service.

## Maple Sugaring Equipment

The following companies manufacture supplies and equipment needed for maple sugaring. Contact them and ask for their catalogs and a list of locations where you might be able to purchase their products.

1. Dominion & Grimm Inc. (USA branch), 1-802-524-9625, [www.dominiongrimm.ca](http://www.dominiongrimm.ca).
2. Leader Evaporator Company, Inc., 1-802-868-5445, [www.leaderevaporator.com](http://www.leaderevaporator.com).
3. <http://www.tapmytrees.com>. Designed for small-scale family maple sugaring, and sells starter kits.

The Hunterdon County Division of Parks and Recreation is dedicated to preserving open space and natural resources, providing safe parks and facilities, and offering educational and recreational opportunities, all contributing to an enhanced quality of life for present and future generations.

## SUMMARY OF RULES AND REGULATIONS

*The rules and regulations governing use of facilities or properties administered by the Hunterdon County Division of Parks and Recreation are promulgated in accordance with provisions of the N.J. Statutes Title 40:32-7.12, which reads as follows:*

**"The Board of Chosen Freeholders may by resolution make, alter, amend, and repeal rules and regulations for the supervision, regulation and control of all activities carried on, conducted, sponsored, arranged, or provided for in connection with a public golf course or other county recreational, playground or public entertainment facility, and for the protection of property, and may prescribe and enforce fines and penalties for the violation of any such rule or regulation."**

**These rules and regulations have been promulgated for the protection of our patrons and for the facilities and natural resources administered by the Hunterdon County Division of Parks and Recreation.**

**Permits:** A fully executed Facility Use Permit, issued by Hunterdon County for any activity shall authorize the activity only insofar as it may be performed in strict accordance with the terms and conditions thereof. The State of NJ, County of Hunterdon, or the local municipality may require additional permits.

**Prohibited Acts:** The violation of any Municipal, State, or Federal law. Advertising, solicitation, ice skating, ice fishing, and any other on-ice activities, downhill skiing, bathing, fuel powered modeled aircraft, the release of any animal, explosives of any kind, poisons of any kind, after-hours use, alcohol without a permit in a non-designated area, controlled dangerous substances, weapons, posting of signage, inappropriate attire, and climbing on, or rappelling from any cliff, rock face, or boulder, with, or without the use of specialized equipment.

**Regulated Activity:** The sale of merchandise, aviation, boating, cross-country skiing, bicycling, and sledding. Battery powered modeled aircraft, and horses must be in designated areas, dogs must be restrained with a leash not exceeding six feet, pet waste must be removed, camping/fires are by permit only. All groups of 15 or more must obtain a permit for use of any Park area.

**Prohibited Acts for the Protection of Property:** No person shall make, excavate on, destroy, paint, fill in, cut, remove or tamper with any property, organic or inorganic.

**Prohibited Acts for the Protection of Natural Resources:** No person shall disturb wildlife or vegetation in any manner. No person shall pollute waters, litter, dump debris, or release helium balloons in any property. It is illegal to remove any natural resource from, or introduce any plant material, bulbs, or seeds to any property without a proper permit or license.

**Prohibited Acts for the Protection of People:** No person shall obstruct a county employee/official, interfere with a visitor, conduct any unsafe act, or cause a hazardous condition.

**Vehicles:** All the provisions of the N.J. State Motor Vehicle Act apply. Vehicles are not allowed in unauthorized areas. Parking is allowed in designated areas only. **ATV's, dirt bikes, and snowmobiles are prohibited on County Park lands.**

**Enforcement:** The rules and regulations of the County shall be enforced by duly authorized Rangers or representatives of the County under the provision of N.J.S.A. 40:32-2, thru 40:32-7.13. Any person who enters into a County Park for any purpose whatsoever has a duty and is presumed to be aware of the provisions of these rules and regulations governing the use of the facilities and properties administered by the Hunterdon County Division of Parks and Recreation.

**Penalties:** Any person violating any of the provisions of these regulations shall, upon conviction before a court or other adjudicative body of jurisdiction, be liable for the replacement, repair or restoration of damaged property, if any, and shall pay a penalty of not more than one thousand dollars (\$1,000.00) or other amount in the discretion of the court or other adjudicative body or may be sentenced to imprisonment in the County jail for the term not exceeding ninety (90) days, or both, provided that this section shall not supersede any applicable penalty provision for specific offenses, which may be set forth in the New Jersey Code of Criminal Justice, N.J.S.A. 2C:1-1, et seq., or in any other applicable state or federal law.

**NOTE:** County Park Rangers of the Hunterdon County Division of Parks and Recreation have the authority to issue summons, and make arrests for violations of rules and regulations governing the use of facilities and properties administered by the Division of Parks and Recreation. This is only a summary of the rules and regulations. Rules applying to special conditions, activities, or situations may be supplemental to these rules and regulations. When special rules apply, they will be posted at affected areas. The complete text of regulations is available for inspection at the Park administration office in Clinton Township during regular

# Making Maple Syrup

## Information Guide



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Website: [www.co.hunterdon.nj.us](http://www.co.hunterdon.nj.us)  
(click on "Parks & Recreation")

*Office Hours:*  
**Monday to Friday 8:00 AM to 4:30 PM**

## Maple Trees

In our area there are two species of maple trees that are often used for sugaring due to the high sugar content in their sap. The first and most preferred is the sugar maple; also known as rock maple or hard maple. This tree can have sugar content as high as three percent. The second maple is the red maple, which has a slightly lower sugar concentration.

The simplest way to identify sugar and red maples is by their leaves. You can go out during the summer and mark maple trees for winter collection. If identifying the trees during winter, you will have to rely on size, bark, twigs and buds.



Sugar maple trees grow to a size of 60 to 80 feet in height. Buds are oval and between 1/4 and 1/2 inch in length. They are located opposite (as opposed to alternate) from one another on the twigs. The twigs and buds are a shiny reddish-brown in color with sharp buds. The bark of the tree is dark gray-brown and curls on one edge in older trees. Sometimes, leaves can be found on the ground. Leaves can be as wide as 3 1/2 inches. They are shaped roughly like a hand, with three large points and two smaller points, and are “U-shaped” between the points.

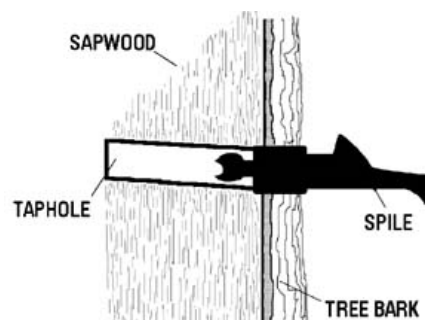


Red maple trees grow to 40 – 60 feet in height. They also differ in bark color from sugar maples. On young trees the bark is smooth and gray to light gray in color. As the tree matures the bark darkens in color and becomes jagged. The buds are also opposite from one another on the twig and shorter in length than the sugar maple. The leaves are smaller than sugar maples and have a toothed or jagged edge. The leaves have only three main points, and are “V-shaped” between the points.

## Before You Begin

Trees can be tapped at the end of January in New Jersey. You must decide if you are willing to fully commit to the process of maple sugaring before tapping. There is no sense in placing a hole in any tree unless you plan to see the finished product.

After tapping a tree, during the next month and a half, trees must be checked on a daily basis and sap collected. The amount of sap flow depends upon many variables such as tree size, daily temperatures, and soil moisture. Typically when sap begins to flow, a tree may provide a minimum of one gallon of sap per day and on a good day up to five gallons.



(Revised 2/2017)

## Equipment

Some of the items needed for maple sugaring may already be at home. The rest are fairly easy to obtain.

1. A hand drill or brace with a 7/16” or 1/2” wood drill.
2. Several well rinsed one-gallon milk jugs or metal pails with covers. It takes at least forty gallons of sap to make one gallon of syrup.
3. Spiles - a stainless steel or aluminum tube that is approximately 2 1/2” in length and 1/2” in diameter with a built-in hook. If you choose not to purchase spiles, 1/2” aluminum or plastic tubing cut to the proper length can be used.
4. Rubber mallet.
5. A large flat-bottomed, rectangular pan.
6. A saucepan.
7. A funnel.
8. Coffee filters.

## Tapping Trees

Choose a tree that is at least 12 inches in diameter. For each additional foot in diameter an additional tap can be used. Drill a hole on the south side of the tree about 2 1/2 feet from the ground and make the hole on a slight upward angle about 1 1/2” to 2” into the tree. The upward angle enables the sap to flow more freely. Also, when the spile is removed, the angle reduces the potential of dirt and other matter in the wound, which may inhibit the tree’s ability to heal. With the rubber mallet, gently tap in the spile and firmly attach your bucket or milk jug to the protruding end of the spile.

## Boiling Sap To Syrup

After you have collected a sufficient amount of sap, you can begin the boiling process. The best location is outside. Most folks are quite successful by using a wood barbecue or propane stove. Boiling sap usually requires at least five to six hours of continuous boiling in a large flat-bottomed pan. Sap is ready to be removed from the first boiling pan when the sap turns amber in color. Transfer the sap to the saucepan and continue boiling. When the sap begins to sheet from a spoon, the correct density for maple syrup has been achieved. The syrup must be filtered while hot to remove any impurities. Use the funnel and coffee filter to remove these impurities and fill your storage container. The heat will create the proper vacuum seal.

## Removing the Tap

When you have finished collecting sap for your project, gently remove the spile, clean it, and put it away for next year. Spiles should be removed by mid-March. At that time, the sap turns amber and tacky and is not suitable for syrup. The tree buds will also begin to swell and will be nearly ready to open into flowers.

It is the policy of the County to provide reasonable accommodations to persons with disabilities upon advance notice of need. Persons requiring accommodations should make a request at least two weeks prior to program attendance.