



Backyard Sugaring: From Sap to Syrup



References

Backyard Sugarin' - Rink Man

The Sugarmaker's Companion—Michael Farrell

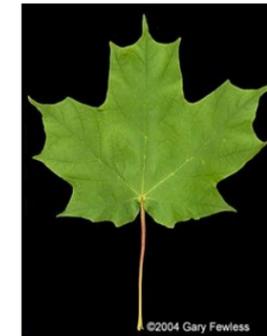
Cornell Sugar Maple Research & Extension Program: <http://maple.dnr.cornell.edu/>

www.mapletrader.com

Maple-ology

- There are 128 species worldwide, and maples are an opposite leaf tree.
- The Sugar Maple (*Acer saccharum*) is state tree of NYS, Vermont, West Virginia and Wisconsin.
- Uses of maples include- baseball bats, bowling pins and lanes, pool cue shafts, timber for ornamental pieces (birds-eye maple), veneer covers, musical instruments,
- Hard Maple refers to Sugar and Black (preferred for higher sugar content)
- Soft Maple refers to Red, Silver, Norway, Box Elder, Japanese, Striped and Mountain Maple

Notes

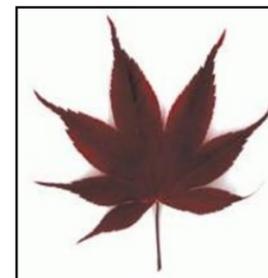


Black Maple



Sugar Maple

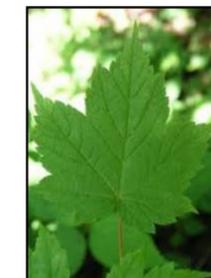
“Hard Maples”



Japanese Maple



Striped Maple

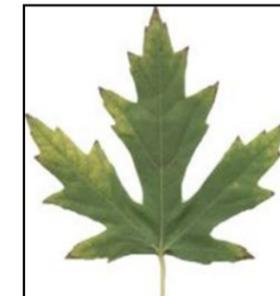


Mountain Maple

“Soft Maples”



Ash Leaf Maple



Silver Maple



Norway Maple



Red Maple

Sweet Considerations

- Ratio of sap to syrup varies greatly (20:1 up to 100:1) and Sugar Maples generally have the highest sugar content (up to 2%). What trees can you tap?
- What kind of fuel to use? (wood, propane, oil, electric)
- Tapping the tree: spiles/taps and hooks (wood, metal, plastic)
- How are you collecting sap?
- What is the pan size?
- Sap storage containers and location?
- Do you have time to boil?

The diameter of tree dictates number of taps

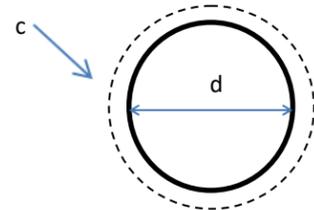
In general:

10"-17" = 1 tap, 18"-24" = 2 taps 24"+ = 3 taps

Calculate diameter (d) from circumference (c, dashed line):

$d = c/3.14$ or $d = c*0.3183$

so if $c = 50''$ $d = 50''/3.14 = 15.92''$, therefore 1 tap in this tree



1. Drill into the tree 1.5" (5/16" or 7/16" diameter) using a power drill or a brace and bit at a slight upward angle. Remember to clean out the hole before driving a spile.
2. Don't over drive the spile you may damage the tree.
3. In the future try and go in the same direction. Place next years tap 1" to either side of the previous tap and up or down the tree 12".



Backyard Sugar Making

1. Determine where you will be finishing the syrup ahead of time.
2. Too much water can peel wall paper
3. Handy finishing tools:
 - Candy thermometer
 - Hydrometer and cup
 - Pots/pans
 - Filters
 - Metal ladle

It is officially syrup:

- when sap hits 7° Fahrenheit above the boiling point (check at least daily)
- 66 Brix on the syrup hydrometer
- consistency that you prefer
- you are more than ready to go to bed!

When temperature and density is reached, get ready to filter. We use a paper pre-filter and a cloth/felt cone filter to remove sugar sand. You may need to change filters as you go.

Sugar sand is a natural salt (magnesium) that precipitates from the sap as you cook. If you over boil as you finish, you will need to re-filter.



(Official Stone Farm Syrup Inspector)